

APPENDIX I
TRAFFIC NOISE TECHNICAL REPORT



Traffic Noise Technical Report

North Houston Highway Improvement Project

From US 59/I-69 at Spur 527 to I-45 at Beltway 8 North

CSJ 0912-00-146

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TABLE OF CONTENTS

1.0	Project Description.....	1
1.1	Existing Facility	3
1.2	Proposed Facility	4
2.0	Traffic Noise Analysis Methodology	7
2.1	Modeling Assumptions	8
2.2	Traffic Data.....	8
3.0	Traffic Noise Background	23
4.0	Predicted Traffic Noise Levels	29
5.0	Evaluation of Noise Abatement	41
6.0	Construction Impacts.....	56
7.0	Conclusion.....	56

LIST OF TABLES

Table 1: 2015 and 2035 Segment 1 Traffic Volumes.....	9
Table 2: 2015 and 2035 Segment 2 Traffic Volumes.....	11
Table 3: 2015 and 2035 Segment 3 Traffic Volumes.....	13
Table 4: Noise Abatement Criteria	24
Table 5: Summary of Traffic Noise Analysis Results for the Reasonable Alternatives.....	29
Table 6: Segment 1 Traffic Noise Levels [dB(A) Leq].....	30
Table 7: Segment 2 Traffic Noise Levels [dB(A) Leq].....	35
Table 8: Segment 3 Traffic Noise Levels [dB(A) Leq].....	37
Table 9: Number of Receivers that would Potentially Benefit from Traffic Noise Barriers per Alternative..	43
Table 10: Segment 1 Potential Noise Abatement Evaluation.....	44
Table 11: Segment 2 Potential Noise Abatement Evaluation.....	50
Table 12: Segment 3 Potential Noise Abatement Evaluation.....	52
Table 13: Segment 1 Traffic Noise Contours [dB(A) Leq]	57
Table 14: Segment 2 Traffic Noise Contours [dB(A) Leq]	59
Table 15: Segment 3 Traffic Noise Contours [dB(A) Leq]	61

LIST OF FIGURES

Figure 1: Project Location Map	2
Figure 2: Segment 1 Existing Land Use (1 of 2)	25
Figure 3: Segment 1 Existing Land Use (2 of 2)	26
Figure 4: Segment 2 Existing Land Use.....	27
Figure 5: Segment 3 Existing Land Use.....	28

LIST OF APPENDICES

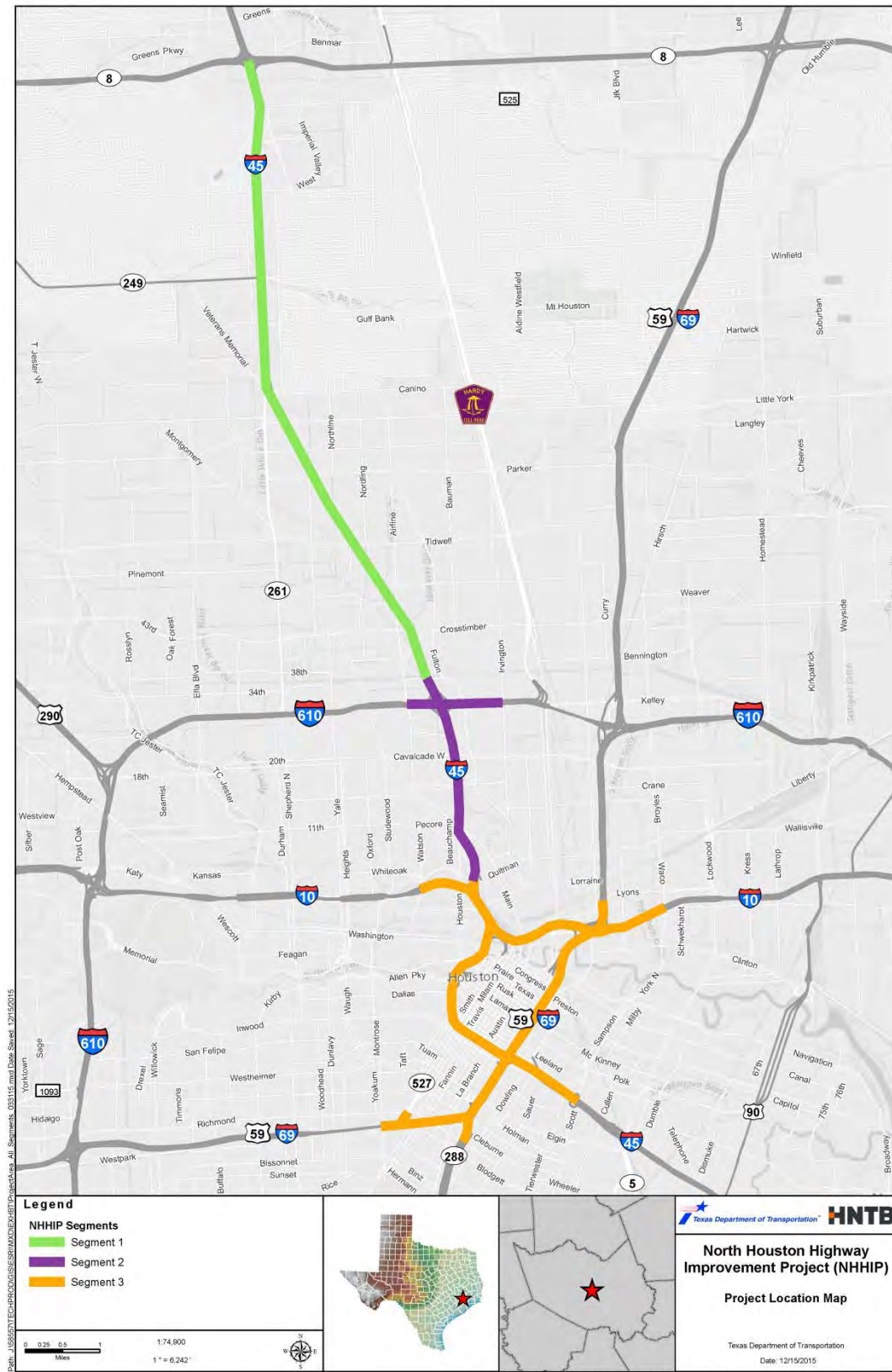
Appendix A	Existing and Proposed Typical Sections
Appendix B	TxDOT Transportation Planning and Programming Division (TP&P) Approval
Appendix C	Traffic Volume Worksheets
Appendix D	Noise Receiver Locations

1.0 PROJECT DESCRIPTION

The Texas Department of Transportation (TxDOT) proposes to construct improvements to Interstate Highway 45 (I-45) in the northern portion of the City of Houston. The proposed project, referred to as the North Houston Highway Improvement Project (NHHIP), begins at the interchange of I-45 and Beltway 8 North and continues south along I-45 to downtown Houston where it terminates at the interchange of U.S. Highway (US) 59/I-69 and Spur 527 south of downtown Houston. The project area also includes portions of I-10 and US 59/I-69 near downtown Houston. The proposed project is composed of three segments, Segments 1, 2 and 3, for which reasonable alternatives are evaluated in the Draft Environmental Impact Statement (DEIS) (**Figure 1: Project Location Map**).

The DEIS includes a no-build alternative, and capacity improvements with High-Occupancy Vehicle (HOV) lanes and bypass lanes. This type of lane is dependent on the interstate it is associated with; for instance, the HOV lanes along I-45 would be known Managed Express (MaX) lanes and the HOV lanes along I-10 would be known as Express Lanes. The primary function of the proposed I-45 MaX lanes is to integrate the use of both HOV, transit and single-occupancy vehicle (SOV) lanes; SOV users would have the potential to be tolled. The primary function of the proposed I-10 Express Lanes is to integrate HOV, transit and bypass traffic; no tolls are being considered at this time.

Figure 1: Project Location Map



1.1 EXISTING FACILITY

The three roadway segments and the existing typical section for each are described below:

Segment 1: I-45 from Beltway 8 North to north of I-610 (North Loop)

I-45 within this segment consists of eight general purpose lanes (i.e., mainlanes; four lanes in each direction), four frontage road lanes (two lanes in each direction), and a reversible high occupancy vehicle (HOV) lane in the middle, all within a variable right-of-way (ROW) of 250 to 300 feet. The existing posted speed limit along the general purpose lanes and reversible HOV lane is 60 miles per hour (mph). The existing posted speed limit for the frontage roads is 45 mph. The length of Segment 1 is approximately 8.8 miles, and the area of the existing ROW is approximately 347 acres.

Segment 2: I-45 from north of I-610 (North Loop) to I-10

I-45 within this segment primarily consists of eight at-grade general purpose lanes (four lanes in each direction), six frontage road lanes (three lanes in each direction), and a reversible HOV lane in the middle, all within a variable ROW of 300 to 325 feet. Segment 2 also includes a depressed section that consists of eight general purpose lanes (four lanes in each direction) and a reversible HOV lane in the middle, all below grade, within a 245-foot ROW. The six frontage road lanes associated with the depressed section (three lanes in each direction) are located at-grade. The existing posted speed limit is 60 mph along the general purpose lanes, 55 mph along the reversible HOV lane, and 40 mph along the frontage road lanes. The I-45 and I-610 frontage roads are discontinuous at the I-45/I-610 interchange. The length of Segment 2 is approximately 4.5 miles, and the area of the existing ROW is approximately 220 acres.

Segment 3: Downtown Loop System (I-45, US 59/I-69, and I-10)

The Downtown Loop System consists of three interstate highways that create a loop around Downtown Houston. I-45 forms the western and southern boundaries of the loop and is known locally as the Pierce Elevated because it partially follows the alignment of Pierce Street. I-10 forms the northern boundary of the loop, and US 59/I-69 forms the eastern boundary of the loop. The loop includes three major interchanges: I-45 and I-10, I-10 and US 59/I-69, and US 59/I-69 and I-45. The interchange of US 59/I-69 and Spur 527 is located south of Downtown Houston.

I-45 along the west side of Downtown Houston consists of six elevated general purpose lanes (three lanes in each direction) within an existing ROW of 205 feet. I-45 along the south side of Downtown Houston (the Pierce Elevated) consists of six elevated general purpose lanes (three lanes in each direction). I-10 north of Downtown Houston, between I-45 and US 59/I-69, consists of 10 general purpose lanes (five lanes in each direction) within an existing ROW of 420 feet. US 59/I-69 along the east side of Downtown Houston consists of six general purpose lanes (three lanes in each direction) within an existing ROW of 225 feet. Generally, local streets serve as one-way frontage roads within Segment 3, except near the I-10 and US 59/I-69 interchange, where the frontage roads are discontinuous. The length of Segment 3, which includes the Downtown Loop System, is approximately 7.1 miles, and the existing ROW area is approximately 637 acres.

Typical sections of the existing roadways are depicted in **Appendix A**.

1.2 PROPOSED FACILITY

Multiple preliminary alternatives for each segment were assessed and screened to identify a set of reasonable alternatives to evaluate for the proposed project. The nine alternatives, three for each segment, that were selected to be evaluated as reasonable alternatives for the proposed project are described below:

Segment 1: I-45 from Beltway 8 North to just north of I-610 (North Loop)

Segment 1, Alternative 4: Widen I-45 Mostly to the West (Proposed Recommended)

Alternative 4 would widen the existing I-45 on the west side of the roadway to accommodate four managed express (MaX) lanes. The proposed typical section would include eight general purpose lanes (four lanes in each direction), four MaX lanes (two lanes in each direction), and six frontage road lanes (three lanes in each direction), all at-grade. Alternative 4 would require approximately 200 to 225 feet of new ROW to the west of the existing I-45. This alternative would require small amounts of land to the east of the existing I-45 ROW at major intersections and between Crosstimbers Street and I-610. Approximately 212 acres of new ROW would be required for this alternative. The length of this alternative would be approximately 8.8 miles.

Segment 1, Alternative 5: Widen I-45 Mostly to the East

Alternative 5 would widen the existing I-45 along the east side of the roadway to accommodate four MaX lanes. The proposed typical section would include eight general purpose lanes (four lanes in each direction), four MaX lanes (two lanes in each direction), and six frontage road lanes (three lanes in each direction), all at-grade. Alternative 5 would require approximately 200 to 225 feet of new ROW to the east of the existing I-45. This alternative would require small amounts of land to the west of the existing I-45 ROW at major intersections. Approximately 239 acres of new ROW would be required for this alternative. The length of this alternative would be approximately 8.8 miles.

Segment 1, Alternative 7: Widen I-45 on Both Sides

Alternative 7 would widen the existing I-45 along both the east and west sides of the roadway to accommodate four elevated MaX lanes. The proposed typical section would include eight general purpose lanes (four lanes in each direction) at-grade, four elevated MaX lanes (two lanes in each direction) on a single structure constructed along the center of the roadway, and six frontage road lanes (three lanes in each direction) at-grade. Alternative 7 would require approximately 45 to 80 feet of new ROW along both sides of the existing I-45. Approximately 120 acres of new ROW would be required for this alternative. The length of this alternative would be approximately 8.8 miles.

Segment 2: I-45 from north of I-610 (North Loop) to I-10 (includes the interchange with I-610)

Segment 2, Alternative 10: Add Four MaX Lanes to I-45 (Proposed Recommended)

Alternative 10 would widen the existing I-45 to accommodate four MaX lanes. Within the at-grade section of I-45, the proposed typical section would include eight general purpose lanes (four lanes in each direction), four MaX lanes (two lanes in each direction), and four frontage road lanes (two lanes in each direction), all at-grade. For this alternative, I-45 would be depressed from north of Cottage Street to Norma Street, a distance of approximately 1,800 feet. Within the depressed section of I-45, the proposed typical section would include eight below-grade general purpose lanes (four lanes in each

direction), and four below-grade MaX lanes (two lanes in each direction), while the four frontage road lanes (two lanes in each direction) would be at-grade. The proposed I-45 and I-610 frontage roads would be continuous through the I-45/I-610 interchange. Alternative 10 would require new ROW for the at-grade section between I-610 and Cottage Street, and between Little White Oak Bayou and Norma Street. Approximately 19 acres of new ROW would be required for this alternative. The length of this alternative, including interchange improvements, would be approximately 4.5 miles.

This alternative provides an opportunity to include a structural “cap” over a portion of the depressed lanes of I-45 from north of Cottage Street to south of N. Main Street. This area could be used as open space. The open space option is conceptual only and would be separate from TxDOT’s roadway project. Any open space would require development and funding by parties other than TxDOT.

Segment 2, Alternative 11: Add Four Elevated MaX Lanes in the Center of I-45

Alternative 11 would widen the existing I-45 and add four elevated MaX lanes. Within the at-grade section of I-45, the proposed typical section would include eight general purpose lanes (four lanes in each direction) and four frontage road lanes (two lanes in each direction), all at-grade, while the four MaX lanes (two lanes in each direction) would be elevated on a single structure at the center of the roadway. Within the depressed section of I-45, the proposed typical section would include eight general purpose lanes (four lanes in each direction) below grade, four MaX lanes (two lanes in each direction) elevated on a single structure at the center of the roadway, and four frontage road lanes (two lanes in each direction) at-grade. The proposed I-45 and I-610 frontage roads would be continuous through the I-45/I-610 interchange. New ROW would be required for the at-grade section between I-610 and Cavalcade Street to accommodate the proposed improvements at the I-45/I-610 interchange. No new ROW would be required for the depressed section. Approximately 10 acres of new ROW would be required for this alternative. The length of this alternative, including interchange improvements, would be approximately 4.5 miles.

Segment 2, Alternative 12: Add Four MaX Lanes (Two Elevated) in the Center of I-45

Alternative 12 would widen the existing I-45 and add two elevated and two at-grade MaX lanes. Within the at-grade section of I-45, the proposed typical section would include eight general purpose lanes (four lanes in each direction) and four frontage road lanes (two lanes in each direction), all at-grade, while the four MaX lanes (two lanes in each direction) would be stacked (the two northbound MaX lanes would be at-grade and the two southbound MaX lanes would be elevated on a single structure along the center of the roadway). Within the depressed section of I-45, the proposed typical section would include eight general purpose lanes (four lanes in each direction) below grade, four MaX lanes (two lanes in each direction) that would be stacked (the two northbound MaX lanes would be below grade and the two southbound MaX lanes would be elevated on a single structure along the center of the roadway), and four frontage road lanes (two lanes in each direction) that would be at-grade. The proposed I-45 and I-610 frontage roads would be continuous through the I-45/I-610 interchange. New ROW would be required for the at-grade section between I-610 and Cavalcade Street to accommodate the proposed improvements at the I-45/I-610 interchange. No new ROW would be required for the depressed section. Approximately 12 acres of new ROW would be required for this alternative. The length of this alternative, including interchange improvements, would be approximately 4.5 miles.

*Segment 3: Downtown Loop System (I-45, US 59/I-69, and I-10)*Segment 3, Alternative 10: Widen I-45 to 10 Lanes

Alternative 10 is an “improve existing” alternative, with the existing interstate highways around Downtown Houston remaining in their current configuration. Alternative 10 would widen the existing I-45 within its existing footprint along the west and south sides of Downtown Houston. The elevated portion of I-45 west and south of Downtown would be reconstructed. The proposed typical section of the widened I-45 would include 10 elevated general purpose lanes; however, the lane configuration would be altered to have six northbound lanes and four southbound lanes. The I-45 MaX lanes proposed in Segments 1 and 2 would terminate in the Downtown area in Segment 3. The I-45 MaX lanes would be parallel to I-10 in the vicinity of the I-45/I-10 interchange and would terminate/begin at Milam Street/Travis Street, respectively. I-10 along the north side of Downtown, between I-45 and US 59/I-69, would be slightly realigned to accommodate four elevated I-10 express lanes (two lanes in each direction) on this segment of I-10. The I-10 express lanes would generally be parallel to I-10, and located on the north side of White Oak Bayou. West of the I-45/I-10 interchange, the I-10 express lanes would connect to the existing I-10 HOV lanes. US 59/I-69 along the east side of Downtown would generally remain in its current configuration. Alternative 10 would require new ROW along I-45 from I-10 to Houston Avenue and from Brazos Street to US 59/I-69. Alternative 10 would require approximately 76 acres of new ROW. The length of this alternative, including interchange improvements, would be approximately 4.4 miles.

Segment 3, Alternative 11: Realign I-45 along I-10 and US 59/I-69 (Proposed Recommended)

Alternative 11 would reroute I-45 to be coincident with US 59/I-69 on the east side of Downtown Houston. The existing elevated I-45 roadway along the west and south sides of Downtown would be removed and relocated to be parallel to I-10 on the north side of Downtown and parallel to US 59/I-69 on the east side of Downtown. Access to the west side of Downtown would be provided via “Downtown Connectors,” which would provide access to and from various Downtown streets. To improve safety and traffic flow in the north and east portions of the proposed project area, both I-10 and US 59/I-69 would be realigned to eliminate the current roadway curvature. I-45 and US 59/I-69 would be depressed along a portion of the alignment east of Downtown. South of the George R. Brown Convention Center, I-45 would begin to elevate to the interchange of I-45 and US 59/I-69 southeast of Downtown, while US 59/I-69 would remain depressed as it continues southwest toward Spur 527. The four proposed I-45 MaX lanes in Segments 1 and 2 would terminate/begin in Segment 3 at Milam Street/Travis Street, respectively. I-10 express lanes (two lanes in each direction) would be located generally in the center of the general purpose lanes within the proposed coincidental alignment of I-10 and I-45 on the north side of Downtown. The I-10 express lanes would vary between being elevated and at-grade. Approximately 190 feet of new ROW to the east of the existing US 59/I-69 along the east side of Downtown would be required to accommodate the proposed realigned I-45. The existing Hamilton Street would be realigned to be adjacent to US 59/I-69 to serve as the southbound frontage road, and the existing St. Emanuel Street would serve as the northbound frontage road. Alternative 11 would require approximately 160 acres of new ROW, the majority of which would be for the I-10 and US 59/I-69 realignments, and to construct the proposed I-45 lanes adjacent to US 59/I-69 along the east side of Downtown. The length of

this alternative, including roadway realignments and interchange improvements, would be approximately 12.0 miles.

This alternative provides an opportunity to include a structural “cap” over the proposed depressed lanes of I-45 and US 59/I-69 from approximately Commerce Street to Lamar Street. This area could be used as open space. The open space option is conceptual only and would be separate from TxDOT’s roadway project. Any open space project would require development and funding by parties other than TxDOT.

Segment 3, Alternative 12: Realign Northbound I-45 along US 59/I-69 and I-10

Alternative 12 would reroute northbound I-45 to be coincident with US 59/I-69 on the east side of Downtown Houston. An elevated structure would be constructed to accommodate four I-45 northbound general purpose lanes that would be located east of the existing US 59/I-69 general purpose lanes. Northbound I-45 traffic would continue on elevated lanes constructed between the I-10 general purpose lanes, then would move northward into Segment 2. Southbound I-45 traffic at the I-45/I-10 interchange northwest of Downtown would be directed onto one-way general purpose lanes along the west and south sides of Downtown, following the existing Pierce Elevated footprint. The four proposed I-45 MaX lanes in Segments 1 and 2 would terminate/begin in Segment 3 at Milam Street/Travis Street, respectively. I-10 express lanes (two lanes in each direction) are proposed to be located along the portion of the existing I-10 north of Downtown between the interchanges of I-10 and I-45, and I-10 and US 59/I-69. Near the US 59/I-69 interchange, the I-10 express lanes would be located at-grade in the center of the general purpose lanes, then would shift to become elevated and generally parallel to I-10, but located on the north side of White Oak Bayou. West of the I-45/I-10 interchange, the I-10 express lanes would connect to the existing I-10 HOV lanes. US 59/I-69 along the east side of Downtown would generally remain in its current configuration, with the I-45 one-way northbound lanes being immediately adjacent to this segment of US 59/I-69. Alternative 12 would require approximately 109 acres of new ROW. The length of this alternative, including interchange improvements, would be approximately 9.8 miles.

The proposed typical sections are depicted in **Appendix A**.

2.0 TRAFFIC NOISE ANALYSIS METHODOLOGY

The project team developed a methodology which was coordinated with TxDOT Environmental Affairs Division (TxDOT-ENV) in December 2015. A traffic noise analysis using the latest TNM version (version 2.5), was completed in accordance with FHWA approved 2011 *Guidelines for Analysis and Abatement of Roadway Traffic Noise*. The modeling years were determined to be 2015 (existing condition) and 2035 (proposed condition). Traffic data from the Houston-Galveston Area Council (H-GAC) 2014 and 2035 modified regional travel demand model (January 2015) were utilized in the analysis. The 2014 traffic data was projected to year 2015 using historic growth rates. The methodology, growth rates, and resulting traffic volumes were approved by TxDOT Transportation Planning and Programing Division (TP&P) on October 27, 2015. The TP&P approval is included as **Appendix B**.

The traffic noise analysis was completed for a total of nine reasonable alternatives (three alternatives per segment) along the entire corridor, shown in **Figure 1**. Traffic noise for representative receivers for the FHWA Noise Abatement Criteria (NAC) categories listed in **Table 2** identified within project limits

were included in the analysis. The analysis provides a comparison of impacts among the alternatives evaluated in the DEIS by providing the number of impacted receivers per alternative.

Because detailed information for the reasonable alternatives is not available, this analysis only includes a qualitative examination of potential mitigation measures that may be feasible and reasonable based on the best available information for areas impacted by traffic noise. A quantitative examination of the potential mitigation measures and specific proposed mitigation details (i.e., noise barrier dimensions) for the project will be determined for the preferred alternative during preparation of the Final EIS (FEIS).

The DEIS is currently under development and is programmed for completion in late 2016. Following the DEIS, preparation of the FEIS will begin. It is anticipated that the final version of the FEIS will be circulated for public comment in summer of 2017. The Record of Decision (ROD) for the project is anticipated for early 2018.

2.1 MODELING ASSUMPTIONS

The methodology, scenario years, and data assumptions were based on availability of data and project schedule. The assumptions were coordinated with the TxDOT-ENV.

The traffic noise modeling effort for the DEIS considered the following elements:

- Existing scenario year: 2015;
- Proposed modeling year: 2035;
- Proposed project ROW; and
- H-GAC traffic network included in their regional travel demand model.

2.2 TRAFFIC DATA

According to the H-GAC modified regional travel demand model (January 2015), average daily traffic (ADT) for the I-45 mainlanes along the three segments of the project vary from 186,330 to 295,400 for the mainlanes in 2015 and from 207,000 to 310,000 for 2035. The traffic projection methodology and 2035 future traffic volumes were approved by TP&P division on October 27, 2015.

A 50-50 percent directional distribution of vehicles traveling on each direction and a K factor of 6 percent were assumed for the analysis. The vehicle classes were divided into light duty vehicles (automobiles), medium duty vehicles (medium trucks), and heavy duty vehicles (heavy trucks), each with 94, 2, and 4 percent design hourly volume respectively. Generally, an average ADT was used for each modeling roadway (main lanes, HOVs, and frontage roads).

The sheets depicting 2015 and 2035 traffic information from H-GAC are included in **Appendix C**. The ADTs for present (2015) and predicted (2035) conditions used in the Segment 1, Segment 2 and Segment 3 TNM models are presented in **Tables 1** through **3**, respectively.

Table 1: 2015 and 2035 Segment 1 Traffic Volumes

Noise Study Area	TNM Roadway Segment	2015	TNM Roadway Segment	2035
Area 1 I-45: Beltway 8 to Aldine Bender Rd	NBML-1	124,719	NBML-1	143,600
	SBML-1	115,189	SBML-1	136,600
	NBFR-1	21,724	NBFR-1	21,600
	SBFR-1	26,088	SBFR-1	25,000
	HOV-1	13,561	NBMaX-1	14,100
			SBMaX-1	24,500
Area 2 I-45: Aldine Bender to West Rd	NBML-2	129,700	NBML-2	149,000
	SBML-2	121,446	SBML-2	141,500
	NBFR-2	16,684	NBFR-2	17,800
	SBFR-2	20,709	SBFR-2	24,600
	HOV-2	16,155	NBMaX-2	31,300
			SBMaX-2	37,500
Area 3 I-45: West Rd to SH 249	NBML-3	134,322	NBML-3	153,300
	SBML-3	124,326	SBML-3	146,600
	NBFR-3	13,987	NBFR-3	16,300
	SBFR-3	15,692	SBFR-3	17,900
	HOV-3	16,155	NBMaX-3	31,300
			SBMaX-3	37,500
Area 4 I-45: SH 249 to Gulf Bank Rd	NBML-4	136,385	NBML-4	154,200
	SBML-4	130,088	SBML-4	146,900
	NBFR-4	14,991	NBFR-4	15,700
	SBFR-4	15,355	SBFR-4	17,100
	HOV-4	16,155	NBMaX-4	20,400
			SBMaX-4	27,500
Area 5 I-45: Gulf Bank Rd to Veterans Memorial Dr	NBML-5	138,016	NBML-5	160,700
	SBML-5	125,116	SBML-5	150,700
	NBFR-5	14,150	NBFR-5	13,500
	SBFR-5	15,799	SBFR-5	14,200
	HOV-5	16,155	NBMaX-5	20,400
			SBMaX-5	27,500
Area 6 I-45: Veterans Memorial Dr to Little York Rd	NBML-6	136,103	NBML-6	135,800
	SBML-6	125,282	SBML-6	136,300
	NBFR-6	12,798	NBFR-6	6,400
	SBFR-6	7,708	SBFR-6	11,700
	HOV-6	13,916	NBMaX-6	20,400
			SBMaX-6	27,500

Noise Study Area	TNM Roadway Segment	2015	TNM Roadway Segment	2035
Area 7 I-45: Little York Rd to Tidwell Rd	NBML-7	130,541	NBML-7	135,800
	SBML-7	124,757	SBML-7	134,300
	NBFR-7	10,721	NBFR-7	12,000
	SBFR-7	9,914	SBFR-7	10,200
	HOV-7	13,916	NBMaX-7	20,400
			SBMaX-7	27,500
Area 8 I-45: Tidwell Rd to Airline Dr	NBML-8	133,050	NBML-8	140,800
	SBML-8	127,148	SBML-8	137,400
	NBFR-8	11,795	NBFR-8	13,000
	SBFR-8	9,713	SBFR-8	10,800
	HOV-8	13,916	NBMaX-8	20,400
			SBMaX-8	27,500
Area 9 I-45: Airline Dr to Stokes St	NBML-9	144,967	NBML-9	148,100
	SBML-9	136,261	SBML-9	143,600
	NBFR-9	7,086	NBFR-9	8,200
	SBFR-9	5,495	SBFR-9	6,100
	HOV-9	11,996	NBMaX-9	20,400
			SBMaX-9	27,500
Area 10 I-45: Stokes St to I-610	NBML-10	82,344	NBML-10	96,400
	SBML-10	76,247	SBML-10	93,500
	NBFR-10	1,415	NBFR-10	2,200
	SBFR-10	108	SBFR-10	100
	HOV-10	11,996	NBMaX-10	20,400
			SBMaX-10	27,500

Source: Modified regional travel demand model (January 2015) 2015 and 2035 was used to determine the anticipated ADTs.

Definitions: Northbound mainlane (NBML), southbound mainlane (SBML), northbound frontage road (NBFR), southbound frontage road (SBFR), HOV, managed/express lane (MaX).

Table 2: 2015 and 2035 Segment 2 Traffic Volumes

Noise Study Area	TNM Roadway Segment	2015	TNM Roadway Segment	2035
Area 1 I-45: I-610 to Link Rd	NBML-1	82,500	NBML-1	96,400
	SBML-1	76,391	SBML-1	93,500
	NBFR-1	0	NBFR-1	0
	SBFR-1	1,429	SBFR-1	1,700
	HOV-1	12,019	NBMaX-1	20,400
			SBMaX-1	27,500
Area 2 I-45: Link Rd to Cavalcade St	NBML-2	95,285	NBML-2	106,400
	SBML-2	86,373	SBML-2	105,100
	NBFR-2	5,171	NBFR-2	5,500
	SBFR-2	5,786	SBFR-2	6,000
	HOV-2	12,019	NBMaX-2	20,400
			SBMaX-2	27,500
Area 3 I-45: Cavalcade St to Patton St	NBML-3	92,356	NBML-3	108,000
	SBML-3	92,408	SBML-3	106,300
	NBFR-3	1,289	NBFR-3	1,300
	SBFR-3	2,807	SBFR-3	3,100
	HOV-3	12,019	NBMaX-3	20,400
			SBMaX-3	27,500
Area 4 I-45: Patton St to N Main St	NBML-4	97,812	NBML-4	108,800
	SBML-4	88,118	SBML-4	106,200
	NBFR-4	3,218	NBFR-4	3,500
	SBFR-4	6,491	SBFR-4	7,700
	HOV-4	12,019	NBMaX-4	20,400
			SBMaX-4	27,500
Area 5 I-45: North Main St to Quitman St	NBML-5	100,312	NBML-5	110,700
	SBML-5	89,576	SBML-5	106,800
	NBFR-5	4,144	NBFR-5	3,300
	SBFR-5	2,833	SBFR-5	2,600
	HOV-5	9,857	NBMaX-5	20,400
			SBMaX-5	27,500
Area 6 I-45: Quitman St to I-10 Ramps	NBML-6	99,530	NBML-6	106,700
	SBML-6	89,596	SBML-6	109,300
	HOV-6	9,857	NBMaX-6	20,400
			SBMaX-6	27,500
Area 7 I-610: N Main St to Airline Dr	WBML-7	120,702	WBML-7	131,900
	EBML-7	122,121	EBML-7	137,500

Noise Study Area	TNM Roadway Segment	2015	TNM Roadway Segment	2035
	WBFR-7	6,888	WBFR-7	9,100
	EBFR-7	4,388	EBFR-7	6,100
Area 8 I-610: Airline Dr to I-45	WBML-8	67,820	WBML-8	89,800
	EBML-8	68,480	EBML-8	91,200
	WBFR-8	11	WBFR-8	13
	EBFR-8	1,429	EBFR-8	1,700
Area 9 I-610: I-45 to Fulton St	WBML-9	67,820	WBML-9	89,800
	EBML-9	68,480	EBML-9	91,200
	WBFR-9	1,418	WBFR-9	2,200
	EBFR-9	0	EBFR-9	0
Area 10 I-610: Fulton St to Irvington Blvd	WBML-10	96,739	WBML-10	120,000
	EBML-10	100,529	EBML-10	123,400
	WBFR-10	4,634	WBFR-10	6,600
	EBFR-10	1,973	EBFR-10	800
Area 11 I-45/I-610 Interchange Direct Connector Ramps	WB to NB	25,525	WB to NB	27,600
	WB to SB	6,429	WB to SB	7,100
	EB to NB	45,463	EB to NB	37,500
	EB to SB	7,721	EB to SB	8,800
	NB to WB	10,494	NB to WB	9,700
	NB to EB	6,403	NB to EB	4,500
	SB to WB	38,519	SB to WB	29,600
	SB to EB	27,559	SB to EB	31,200

Source: Modified regional travel demand model (January 2015) 2015 and 2035 was used to determine the anticipated ADTs.

Definitions: Northbound mainlane (NBML), southbound mainlane (SBML), northbound frontage road (NBFR), southbound frontage road (SBFR), high occupancy vehicle (HOV), managed/express lane (MaX).

Table 3: 2015 and 2035 Segment 3 Traffic Volumes

Roadway	Segment	Mainlane ADT	MaX ADT	FR ADT ¹
Existing (2015)				
I-10 EB	Start to I-45 NB exit	100,963	7,170 ¹	N/A
	I-45 NB exit to I-45 SB exit	85,363		
	I-45 SB exit to Smith exit	52,967		
	Smith exit to I-45 SB entrance	41,433	N/A	
	I-45 SB entrance to I-45 NB entrance	53,548		
	I-45 NB entrance to McKee exit	63,712		
	McKee exit to San Jacinto entrance	59,359		14,137
	San Jacinto entrance to Hamilton/I-69 SB exit	71,520		2,388
	Hamilton/I-69 SB exit to I-69 NB exit	56,835	282	
	I-69 NB exit to I-69 NB/I-69 SB/Chartres entrance	41,709		
	I-69 NB/I-69 SB/Chartres entrance to End	84,969		
I-10 WB	Start to I-69 NB exit	77,620	N/A	236
	I-69 NB exit to I-69 SB/Hamilton exit	68,771		N/A
	I-69 SB/Hamilton exit to I-69 SB entrance	38,787		1,846
	I-69 SB entrance to I-69 NB/Chartres entrance	51,316		6,876
	I-69 NB/Chartres entrance to San Jacinto exit	70,742		N/A
	San Jacinto entrance to McKee entrance	61,161		
	McKee entrance to I-45 SB exit	67,959		
	I-45 SB exit to I-45 NB exit	57,354	8,617 ¹	
	I-45 NB exit to Louisiana entrance	46,120		
	Louisiana entrance to I-45 NB entrance	59,183		
	I-45 NB entrance to I-45 SB entrance	99,746		
	I-45 SB entrance to End	115,517		
I-45 SB	Start to Quitman exit	100,841		9,857 ¹
	Quitman exit to I-10 WB exit	97,101		
	I-10 WB exit to Milam/I-10 EB exit	82,103		
	Milam/I-10 EB exit to I-10 EB entrance	62,006		
	I-10 EB entrance to I-10 WB entrance	94,403		
	I-10 WB entrance to Dallas/Pierce and McKinney exits	105,008		
	Dallas/Pierce and McKinney exits to Memorial entrance	75,765	N/A	
	Memorial entrance to I-69 NB and SH-288 SB exits	89,972		

Roadway	Segment	Mainlane ADT	MaX ADT	FR ADT ¹	
	I-69 NB and SH-288 SB exits to I-69 SB and SH-288 NB entrances	53,014			
	I-69 SB and SH-288 NB entrances to End	103,727	11,166 ¹		
I-45 NB	Start to I-69 NB exit	103,528	11,166 ¹	23,313	
	I-69 NB exit to SH-288 SB exit	88,700	N/A	N/A	
	SH-288 SB exit to I-69 SB entrance	39,445			
	I-69 SB entrance to SH-288 NB entrance	40,236			
	SH-288 NB entrance to Pease/Allen Pkwy/Walker entrance	74,108			
	Pease/Allen Pkwy/Walker entrance to I-10 EB exit	97,693			
	I-10 EB exit to I-10 WB exit	87,529	9,857 ¹		
	I-10 WB exit to Travis/I-10 WB entrance	46,966			
	Travis/I-10 WB entrance to I-10 EB entrance	66,582			
	I-10 EB entrance to Quitman entrance	82,181			
	Quitman entrance to End	86,339			
I-69 SB	Start to I-10 WB/I-10 EB exit	99,534	2,446 ¹	1,298	
	I-10 WB/I-10 EB exit to Lyons entrance	73,184		546	
	Lyons entrance to Jackson exit	76,453		N/A	
	Jackson exit to I-10 WB/I-10 EB entrance	68,208			
	I-10 WB/I-10 EB entrance to I-45 NB/I-45 SB exit	104,314	N/A		
	I-45 NB/I-45 SB exit to Webster entrance	83,884		3,722	
	Webster entrance to SH-288 SB exit	100,328		5,288	
	SH-288 SB exit to SH-288 SB entrance	58,576		5,443	
	SH-288 SB entrance to SH-288 NB entrance	103,466		539	
	SH-288 NB entrance to Fannin exit	118,960		N/A	
	Fannin exit to Spur 527 entrance	111,745			
	Spur 527 entrance to End	153,560	7,587 ¹		
I-69 NB	Start to Spur 527 and Main exits	156,327	7,587 ¹	N/A	
	Spur 527 and Main exits to San Jacinto entrance	112,879	N/A		
	San Jacinto entrance to SH-288 SB exit	122,133			
	SH-288 SB exit to SH-288 NB exit	110,535			
	SH-288 NB exit to SH-288 NB entrance	75,318			
	SH-288 NB entrance to Gray exit	116,053			5,041
	Gray exit to McGowen entrance	105,593			5,007
	McGowen entrance to Polk exit	112,713			15,546
	Polk exit to I-45 NB/I-45 SB entrance	101,248			24,362
	I-45 NB/I-45 SB entrance to I-10WB/I-10 EB exit	116,788			8,180

Roadway	Segment	Mainlane ADT	MaX ADT	FR ADT ¹	
	I-10 WB/I-10 EB exit to Chenevert entrance	85,837	2,446 ¹	N/A	
	Chenevert entrance to Lyons exit	94,380			
	Lyons exit to I-10 WB/I-10 EB entrance	91,020		1,364	
	I-10 WB/I-10 EB entrance to End	112,398			
SH-288 SB	I-45 NB/I-45 SB entrance to I-69 SB exit	85,501	N/A	N/A	
	I-69 SB exit to Jackson entrance	40,611			
	Jackson entrance to I-69 SB and I-69 NB/Hamilton/Berry entrances	42,486			
	I-69 SB and I-69 NB/Hamilton/Berry entrances to End	102,236			
SH-288 NB	Start to I-69 SB exit	93,444	N/A	N/A	
	I-69 SB exit to I-69 NB/Chartres exit	77,949			
	I-69 SB/Chartres exit to Chenevert exit	33,632			
	Chenevert exit to I-69 NB entrance	29,730			
	I-69 NB entrance to I-45 NB/I-45 SB exit	64,946			
Alternative 10 (2035)					
I-10 EB	Start to I-45 NB exit	124,200	14,100	N/A	
	I-45 NB exit to I-45 SB exit	115,800			
	I-45 SB exit to Smith exit	67,700	8,600		4,700
	Smith exit to I-45 SB entrance	43,500			
	I-45 SB entrance to I-45 NB entrance	54,900			
	I-45 NB entrance to McKee exit	68,800			
	McKee exit to San Jacinto entrance	63,000			N/A
	San Jacinto entrance to Hamilton/I-69 SB exit	72,900			
	Hamilton/I-69 SB exit to Jensen exit	60,000			
	Jensen exit to I-69 NB exit	56,900		N/A	2,900
	I-69 NB exit to I-69 NB/Chartres entrance	40,200			
	I-69 NB/Chartres entrance to I-69 SB entrance	82,100			
	I-69 SB entrance to I-10 EB HOV entrance	95,900			
	I-10 EB HOV entrance to Waco exit	104,500	N/A	2,900	
	Waco exit to End	103,200			
I-10 WB	Start to Waco entrance	93,000	N/A	800	
	Waco entrance to I-10 WB HOV exit	94,600			
	I-10 WB HOV exit to Gregg exit	85,900	8,700		
	Gregg exit to I-69 NB exit	85,100			
	I-69 NB exit to I-69 SB/Hamilton exit	77,000			
	I-69 SB/Hamilton exit to McKee exit	48,200			
	McKee exit to I-69 SB entrance	43,500			

Roadway	Segment	Mainlane ADT	MaX ADT	FR ADT ¹
	I-69 SB entrance to I-69 NB/Chartres entrance	56,900		3,200
	I-69 NB/Chartres entrance to McKee entrance	77,000		
	McKee entrance to I-45 SB exit	89,200		N/A
	I-45 SB exit to I-45 NB exit	77,200		
	I-45 NB exit to Louisiana entrance	60,800		
	Louisiana entrance to I-45 NB entrance	84,100		
	I-45 NB entrance to I-45 SB entrance	153,600	14,400	
	I-45 SB entrance to End	167,300		
I-45 SB	Start to Quitman exit	115,900	23,500	N/A
	Quitman exit to I-10 WB exit	109,500		
	I-10 WB exit to I-45 SB HOV entrance	95,800		
	I-45 SB HOV entrance to Milam/I-10 EB exit	115,600	3,800	
	Milam/I-10 EB exit to I-10 EB entrance	92,700		
	I-10 EB entrance to I-10 WB entrance	140,800	N/A	
	I-10 WB entrance to Heiner/McKinney exit	152,700		
	Heiner/McKinney exit to Allen Pkwy exit	111,300		
	Allen Pkwy exit to Allen Pkwy entrance	104,600		
	Allen Pkwy entrance to I-69 NB and SH-288 SB exits	119,700		
	I-69 NB and SH-288 SB exits to SH-288 NB entrance	61,300		
	SH-288 NB entrance to I-69 SB entrance	94,800		
	I-69 SB entrance to End	115,500	13,400 ¹	
I-45 NB	Start to I-69 NB exit	117,200	13,400 ¹	26,700
	I-69 NB exit to SH-288 SB exit	106,700	N/A	N/A
	SH-288 SB exit to I-69 SB entrance	56,100		
	I-69 SB entrance to SH-288 NB entrance	56,900		
	SH-288 NB entrance to Dallas exit	120,700		
	Dallas exit to Houston exit	114,800		
	Houston exit to Pease entrance	104,300		
	Pease entrance to Allen Pkwy/Walker entrance	119,800		
	Allen Pkwy/Walker entrance to I-10 EB exit	143,400	20,400	
	I-10 EB exit to I-10 WB exit	129,400		
	I-10 WB exit to I-10 WB/Louisiana entrance	59,900		
	I-10 WB/Louisiana entrance to I-10 EB/Travis entrance	80,600		
	I-10 EB/Travis entrance to End	92,500		
I-69 SB	Start to I-10 WB/I-10 EB exit	118,200	3,800 ¹	

Roadway	Segment	Mainlane ADT	MaX ADT	FR ADT ¹	
	I-10 WB/I-10 EB exit to Lyons entrance	91,100		1,000	
	Lyons entrance to Jackson exit	94,300		N/A	N/A
	Jackson exit to I-10 WB/I-10 EB/Hardy entrance	84,500			
	I-10 WB/I-10 EB/Hardy entrance to I-45 NB/I-45 SB exit	139,000			
	I-45 NB/I-45 SB exit to SH-288 SB exit	117,600	4,600		
	SH-288 SB exit to Webster entrance	65,300	5,100		
	Webster entrance to SH-288 SB entrance	94,500	5,100		
	SH-288 SB entrance to Caroline exit	137,100	200		
	Caroline exit to SH-288 NB entrance	120,700	N/A		
	SH-288 NB entrance to Spur 527 entrance	183,000			
	Spur 527 entrance to End	303,700			
			9,200 ¹		
I-69 NB	Start to Spur 527 and Main exits	191,200	9,200 ¹	N/A	
	Spur 527 and Main exits to San Jacinto entrance	142,500	N/A		9,500
	San Jacinto entrance to SH-288 SB exit	152,100			
	SH-288 SB exit to SH-288 NB exit	145,000			
	SH-288 NB exit to SH-288 NB entrance	101,900			
	SH-288 NB entrance to Gray exit	147,900		8,400	
	Gray exit to McGowen entrance	138,700		10,500	
	McGowen entrance to Polk exit	145,000		19,400	
	Polk exit to I-45 NB/I-45 SB entrance	135,500		27,900	
	I-45 NB/I-45 SB entrance to I-10 EB/I-10 WB/Hardy/McKee exit	146,800		3,800 ¹	N/A
	I-10 EB/I-10 WB/Hardy/McKee exit to Chenevert entrance	94,800			
	Chenevert entrance to Lyons exit	102,300	1,500		
	Lyons exit to I-10 WB/I-10 EB entrance	98,000			
	I-10 WB/I-10 EB entrance to End	122,800			
SH-288 SB	I-45 NB/I-45 SB entrance to I-69 SB exit	108,200	N/A	N/A	
	I-69SB exit to Jackson entrance	65,600			
	Jackson entrance to I-69 NB and I-69 SB/Webster/Hamilton entrances	69,700			
	I-69NB and I-69 SB/Webster/Hamilton entrances to End	136,500			
SH-288 NB	Start to I-69 SB exit	138,400	N/A	N/A	
	I-69 SB exit to I-69 NB/Chartres exit	119,600			
	I-69 NB/Chartres exit to Chenevert exit	61,700			
	Chenevert exit to I-69 NB entrance	54,200			

Roadway	Segment	Mainlane ADT	MaX ADT	FR ADT ¹
	I-69 NB entrance to I-45NB/I-45 SB exit	97,300		
Alternative 11 (2035)				
I-10 EB	Start to I-45 NB/I-45 SB exit	123,200	23,600	N/A
	I-45 NB/I-45 SB exit to Downtown Connector exit	81,000		
	Downtown Connector exit to Smith exit	52,900		
	Smith exit to Downtown Connector and I-45 SB entrances	44,300	18,100	
	Downtown Connector and I-45 SB entrances to McKee exit	79,800		
	McKee exit to San Jacinto entrance	74,900		
	San Jacinto entrance to Hamilton/I-69 SB exit	88,900		4,700
	Hamilton/I-69 SB exit to Jensen exit	73,300		
	Jensen exit to I-69 NB exit	70,300		
	I-69 NB exit to I-69NB/I-69 SB/Chartres and I-10 EB HOV entrances	54,700		N/A
	I-69NB/I-69 SB/Chartres and I-10 EB HOV entrances to Waco exit	114,400	N/A	2,900
	Waco exit to End	109,600		
I-10 WB	Start to Waco entrance/I-10 WB HOV exit	102,800	N/A	N/A
	Waco entrance/I-10 WB HOV exit to Gregg exit	88,600	31,400	800
	Gregg exit to I-69 NB exit	85,200		
	I-69 NB exit to I-69 SB/Hamilton and Elysian exits	76,500		
	I-69 SB/Hamilton and Elysian exits to I-69 SB entrance	33,000		N/A
	I-69 SB entrance to I-69 NB/Chartres entrance	37,000		3,200
	I-69 NB/Chartres entrance to McKee entrance	54,500		
	McKee entrance to Downtown Connector exit	82,300	22,900	N/A
	Downtown Connector exit to I-45 NB entrance	70,500		
	I-45 NB entrance to I-45 NB exit	115,800		
	I-45 NB exit to Louisiana entrance	95,900		
	Louisiana entrance to Downtown Connector entrance	110,200		
	Downtown Connector entrance to I-45 SB entrance	126,500		
	I-45 SB entrance to End	142,100		
I-45 SB	Start to Quitman exit	116,500	16,600	N/A

Roadway	Segment	Mainlane ADT	MaX ADT	FR ADT ¹
	Quitman exit to I-10 WB exit	109,700		
	I-10 WB exit to Downtown Connector exit	94,100		
	Downtown Connector exit to I-45 SB HOV entrance	54,600		
	I-45 SB HOV entrance to I-10 EB entrance	63,900	7,330	
	I-10 EB entrance to Milam exit	94,600		
	Milam exit to I-10 EB exit	76,700		
	I-10 EB exit to I-69 SB exit	61,200	N/A	
	I-69 SB exit to SH-288 SB exit	52,000		
	SH-288 SB exit to I-69 SB entrance	32,100		
	I-69 SB entrance to End	56,200	13,400 ¹	
I-45 NB	Start to SH-288 NB/I-69 NB entrance	54,300	13,400 ¹	26,700
	SH-288 NB/I-69 NB entrance to I-10 WB exit	87,400	N/A	N/A
	I-10 WB exit to I-10 WB entrance	42,200		
	I-10 WB entrance to Downtown Connector/Travis entrance	62,000	10,900	
	Downtown Connector/Travis entrance to End	91,900		
I-69 SB	Start to I-10 WB/I-10 EB exit	104,900	3,800 ¹	
	I-10 WB/I-10 EB exit to Lyons entrance	90,700		1,000
	Lyons entrance to Jackson exit	95,500		N/A
	Jackson exit to I-10 WB/I-10 EB/Hardy/I-45 SB entrance	83,600		
	I-10 WB/I-10 EB/Hardy/I-45 SB entrance to I-45 SB and Bell exits	163,100	N/A	
	I-45 SB and Bell exits to SH-288 SB exit	122,500		9,500
	SH-288 SB exit to I-45 NB and Webster entrances	67,400		7,100
	I-45 NB and Webster entrances to Alameda exit	127,000		200
	Alameda exit to SH-288 NB entrance	114,800		N/A
	SH-288 NB entrance to Spur 527 entrance	130,200		
	Spur 527 entrance to End	176,000		
	I-69 NB	Start to Spur 527 exit	125,300	9,200 ¹
Spur 527 exit to Main exit		93,400	N/A	
Main exit to San Jacinto entrance		83,500		
San Jacinto entrance to SH-288 SB exit		97,400		
SH-288 SB exit to I-45 SB exit		85,500		300
I-45 SB exit to SH-288 NB entrance		64,300		8,247
SH-288 NB entrance to Gray exit		112,300		

Roadway	Segment	Mainlane ADT	MaX ADT	FR ADT ¹
	Gray exit to I-45 NB and Dallas exits	104,900		10,700
	I-45 NB and Dallas exit to I-45 NB/I-45 SB entrance	84,500		N/A
	I-45 NB/I-45 SB entrance to Leeland entrance	95,900		29,600
	Leeland entrance to I-10 WB/I-10 EB/Hardy/McKee exit	105,600	3,800 ¹	15,400
	I-10 WB/I-10 EB/Hardy/McKee exit to Chenevert entrance	62,300		N/A
	Chenevert entrance to Lyons exit	70,300		
	Lyons exit to I-10 WB/I-10 EB entrance	66,300		
	I-10 WB/I-10 EB entrance to End	90,600		
SH-288 SB	I-45 SB/I-69 SB entrance to I-45 NB entrance	75,000	N/A	N/A
	I-45 NB entrance to SH-288 SB HOV exit	104,400	7,100	
	SH-288 SB HOV exit to Hamilton entrance	86,100	25,500	
	Hamilton entrance to I-69 NB entrance	97,300		
	I-69 NB entrance to End	109,300		
SH-288 NB	Start to I-69 SB exit	113,800	10,200	N/A
	I-69 SB exit to I-69 NB/Chartres and I-45 NB/I-45 SB exits	98,300		
Downtown Connector SB	I-10 EB and I-45 SB entrances to McKinney/Allen Pkwy exit	67,600	N/A	N/A
	McKinney/Allen Pkwy exit to I-10 WB entrance	51,100		
	I-10 WB entrance to Heiner exit	62,900		
	Heiner exit to End	38,400		
Downtown Connector NB	Start to Allen Pkwy entrance	32,200	N/A	N/A
	Allen Pkwy entrance to Walker entrance	51,800		
	Walker entrance to I-10 EB exit	60,400		
	I-10 EB exit to I-10 WB and I-45 NB exits	40,400		
Alternative 12 (2035)				
I-10 EB	Start to I-45 NB exit	124,100	17,300	N/A
	I-45 NB exit to I-45 SB exit	114,700		
	I-45 SB exit to Smith exit	63,300		
	Smith exit to I-45 SB entrance	40,200	11,100	
	I-45 SB entrance to Downtown Connector entrance	53,700		
	Downtown Connector entrance to McKee exit	63,600		
	McKee exit to San Jacinto entrance	56,300		
	San Jacinto entrance to Hamilton/I-69 SB exit	70,700		4,700

Roadway	Segment	Mainlane ADT	MaX ADT	FR ADT ¹
	Hamilton/I-69 SB exit to Jensen exit	57,800		
	Jensen exit to I-69 NB exit	54,400		
	I-69 NB exit to I-69 NB/Chartres entrance	39,800		
	I-69 NB/Chartres entrance to I-69 SB entrance	77,900		
	I-69 SB entrance to I-10 EB HOV entrance	91,000		
	I-10 EB HOV entrance to Waco exit	102,000	N/A	2,900
	Waco exit to End	96,000		
I-10 WB	Start to Waco entrance	101,600	N/A	N/A
	Waco entrance to I-10 WB HOV exit	103,800	11,400	800
	I-10 WB HOV exit to Gregg exit	92,400		
	Gregg exit to I-69 NB exit	92,000		
	I-69 NB exit to I-69 SB/Hamilton exit	83,800		
	I-69 SB/Hamilton exit to McKee exit	55,100		
	McKee exit to I-69 SB entrance	52,900		
	I-69 SB entrance to I-69 NB/Chartres entrance	64,600		3,200
	I-69 NB/Chartres entrance to McKee entrance	89,500		3,900
	McKee entrance to I-45 SB exit	101,900		9,300
	I-45 SB exit to I-45 NB exit	89,700		19,800
	I-45 NB exit to Louisiana entrance	77,100		
	Louisiana entrance to I-45 NB/Downtown Connector entrance	100,500		
	I-45 NB/Downtown Connector entrance to I-45 SB entrance	160,000		
	I-45 SB entrance to End	172,000		
I-45 SB	Start to Quitman exit	119,000	24,700	N/A
	Quitman exit to I-10 WB exit	114,000		
	I-10 WB exit to I-45 SB HOV entrance	102,100		
	I-45 SB HOV entrance to Milam/I-10 EB exit	121,900	4,800	
	Milam/I-10 EB exit to I-10 EB entrance	97,300		
	I-10 EB entrance to I-10 WB entrance	148,600	N/A	
	I-10 WB entrance to McKinney exit	160,800		
	McKinney exit to Allen Pkwy exit	148,200		
	Allen Pkwy exit to Jefferson exit	141,100		
	Jefferson exit to Heiner entrance	108,500		
	Heiner entrance to I-69 NB and SH-288 SB exits	119,500		
	I-69 NB and SH-288 SB exits to SH-288 NB and I-69 SB entrances	59,600		
	SH-288 NB and I-69 SB entrances to End	112,000		

Roadway	Segment	Mainlane ADT	MaX ADT	FR ADT ¹	
I-45 NB	Start to I-69 NB and SH-288 SB exits	108,600	13,400 ¹	26,700	
	I-69 NB and SH-288 SB exits to SH-288 NB entrance	36,400	N/A	N/A	
	SH-288 NB entrance to I-10 WB exit	94,700			
	I-10 WB exit to Downtown Connector entrance	44,400			
	Downtown Connector entrance to I-10 WB/Louisiana entrance	69,000	20,500		
	I-10 WB/Louisiana entrance to I-10 EB/Travis entrance	86,100			
	I-10 EB/Travis entrance to End	99,300			
I-69 SB	Start to I-10 WB/I-10 EB exit	126,600	3,800 ¹		1,900
	I-10 WB/I-10 EB exit to Lyons entrance	101,900		1,000	
	Lyons entrance to Jackson exit	105,900		N/A	
	Jackson exit to I-10 WB/I-10 EB/Hardy entrance	96,100			
	I-10 WB/I-10 EB/Hardy entrance to I-45 SB exit	150,500	N/A	4,600	
	I-45 SB exit to SH-288 SB exit	132,400			
	SH-288 SB exit to Webster entrance	80,200			5,100
	Webster entrance to SH-288 SB entrance	102,600			5,100
	SH-288 SB entrance to Caroline exit	142,100			200
	Caroline exit to SH-288 NB entrance	125,500		N/A	
	SH-288 NB entrance to Spur 527 entrance	144,300			
	Spur 527 entrance to End	196,300			9,200 ¹
	I-69 NB	Start to Spur 527 exit	218,200	9,200 ¹	N/A
Spur 527 exit to Main exit		207,800	N/A	N/A	
Main exit to San Jacinto entrance		158,500			
San Jacinto entrance to SH-288 SB exit		166,100			
SH-288 SB exit to SH-288 NB exit		159,000		9,500	
SH-288 NB exit to SH-288 NB entrance		116,200		8,400	
SH-288 NB entrance to Gray exit		163,300			
Gray exit to McGowen entrance		146,700		8,200	
McGowen entrance to Polk exit		153,300		10,700	
Polk exit to I-45 NB/I-45 SB entrance		145,200		19,600	
I-45 NB/I-45 SB entrance to I-10 EB/I-10 WB/Hardy/McKee exit		157,800		22,300	
I-10 EB/I-10 WB/Hardy/McKee exit to Chenevert entrance		107,300	3,800 ¹	N/A	
Chenevert entrance to Lyons exit		113,800			
Lyons exit to I-10 WB/I-10 EB entrance		109,500			

Roadway	Segment	Mainlane ADT	MaX ADT	FR ADT ¹
	I-10 WB/I-10 EB entrance to End	136,600		
SH-288 SB	I-45 NB/I-45 SB entrance to I-69 SB/Caroline exit	119,500	N/A	N/A
	I-69SB/Caroline exit to Jackson entrance	80,000		
	Jackson entrance to I-69 NB and I-69 SB/Webster/Hamilton entrances	83,700		
	I-69NB and I-69 SB/Hamilton entrances to End	149,600		
SH-288 NB	Start to I-69 SB exit	138,400	N/A	N/A
	I-69 SB exit to I-69 NB/Chartres exit	119,600		
	I-69NB/Chartres exit to Chenevert exit	63,600		
	Chenevert exit to I-69 NB entrance	49,600		
	I-69 NB entrance to I-45NB/I-45 SB exit	92,500		
Downtown Connector NB	Start to Walker entrance	36,400	N/A	N/A
	Walker entrance to I-10 EB exit	43,700		
	I-10 EB exit to I-10 WB and I-45 NB exits	33,800		

Source: Modified regional travel demand model (January 2015) 2015 and 2035 was used to determine the anticipated ADTs.

Definitions: Northbound mainline (NBML), southbound mainline (SBML), northbound frontage road (NBFR), southbound frontage road (SBFR), high occupancy vehicle (HOV), managed/express lane (MaX).

Note: 1. Traffic data from H-GAC regional travel demand models. All other traffic data was provided by CDM Smith.

3.0 TRAFFIC NOISE BACKGROUND

Sound from highway traffic is generated primarily from a vehicle's tires, engine, and exhaust. It is commonly measured in decibels and is expressed as "dB."

Sound occurs over a wide range of frequencies. However, not all frequencies are detectable by the human ear; therefore, an adjustment is made to the high and low frequencies to approximate the way an average person hears traffic sounds. This adjustment is called A-weighting and is expressed as "dB(A)."

Also, because traffic sound levels are never constant due to the changing number, type, and speed of vehicles, a single value is used to represent the average or equivalent sound level and is expressed as "Leq."

The traffic noise analysis typically includes the following elements:

- Identification of land use activity areas that might be impacted by traffic noise;
- Determination of existing noise levels;
- Prediction of future noise levels;
- Identification of possible noise impacts; and
- Consideration and evaluation of measures to reduce noise impacts.

The FHWA has established the following Noise Abatement Criteria (NAC) for various land use activity areas that are used as one of two means to determine when a traffic noise impact would occur (**Table 4**).

Table 4: Noise Abatement Criteria

Activity Category	FHWA dB(A) Leq	Description of Land Use Activity Areas
A	57 (exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (exterior)	Residential.
C	67 (exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72 (exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A-D or F.
F	--	Agricultural, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	--	Undeveloped lands that are not permitted.

A noise impact occurs when either the absolute or relative criterion is met:

Absolute criterion: the predicted noise level at a receiver approaches, equals, or exceeds the NAC. “Approach” is defined as 1 dB(A) below the FHWA NAC. For example, a noise impact would occur at a Category B residence if the noise level is predicted to be 66 dB(A) or above.

Relative criterion: the predicted noise level substantially exceeds the existing noise level at a receiver even though the predicted noise level does not approach, equal, or exceed the NAC. “Substantially exceeds” is defined as more than 10 dB(A). For example, a noise impact would occur at a Category B residence if the existing level is 54 dB(A) and the predicted level is 65 dB(A) [11 dB(A) increase].

When a traffic noise impact occurs, noise abatement measures must be considered. A noise abatement measure is any positive action taken to reduce the impact of traffic noise on an activity area. **Figure 2** through **Figure 5** show the present land uses within project limits. These land uses were field verified in January 2015.

Figure 2: Segment 1 Existing Land Use (1 of 2)

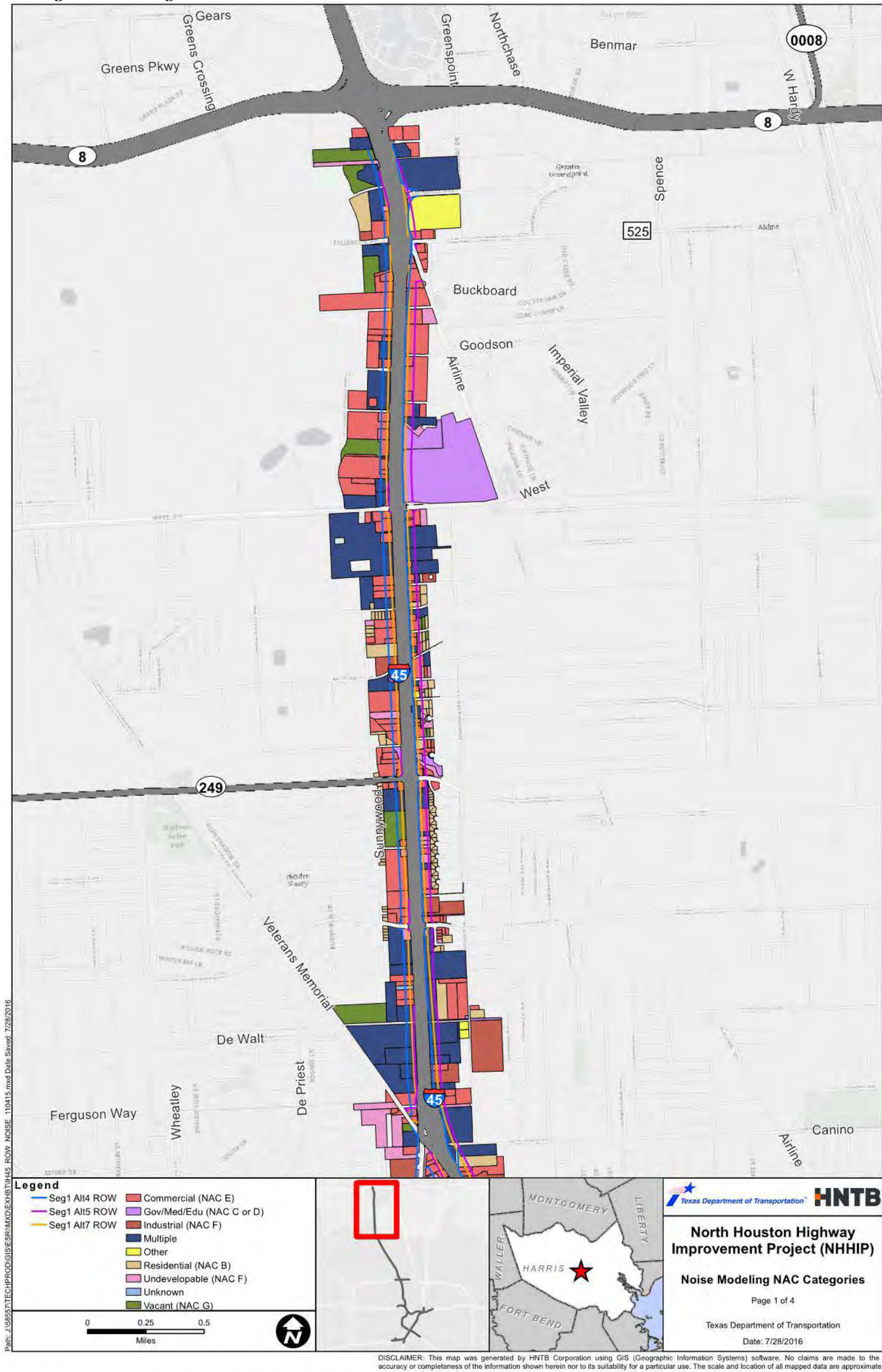


Figure 3: Segment 1 Existing Land Use (2 of 2)



Figure 4: Segment 2 Existing Land Use

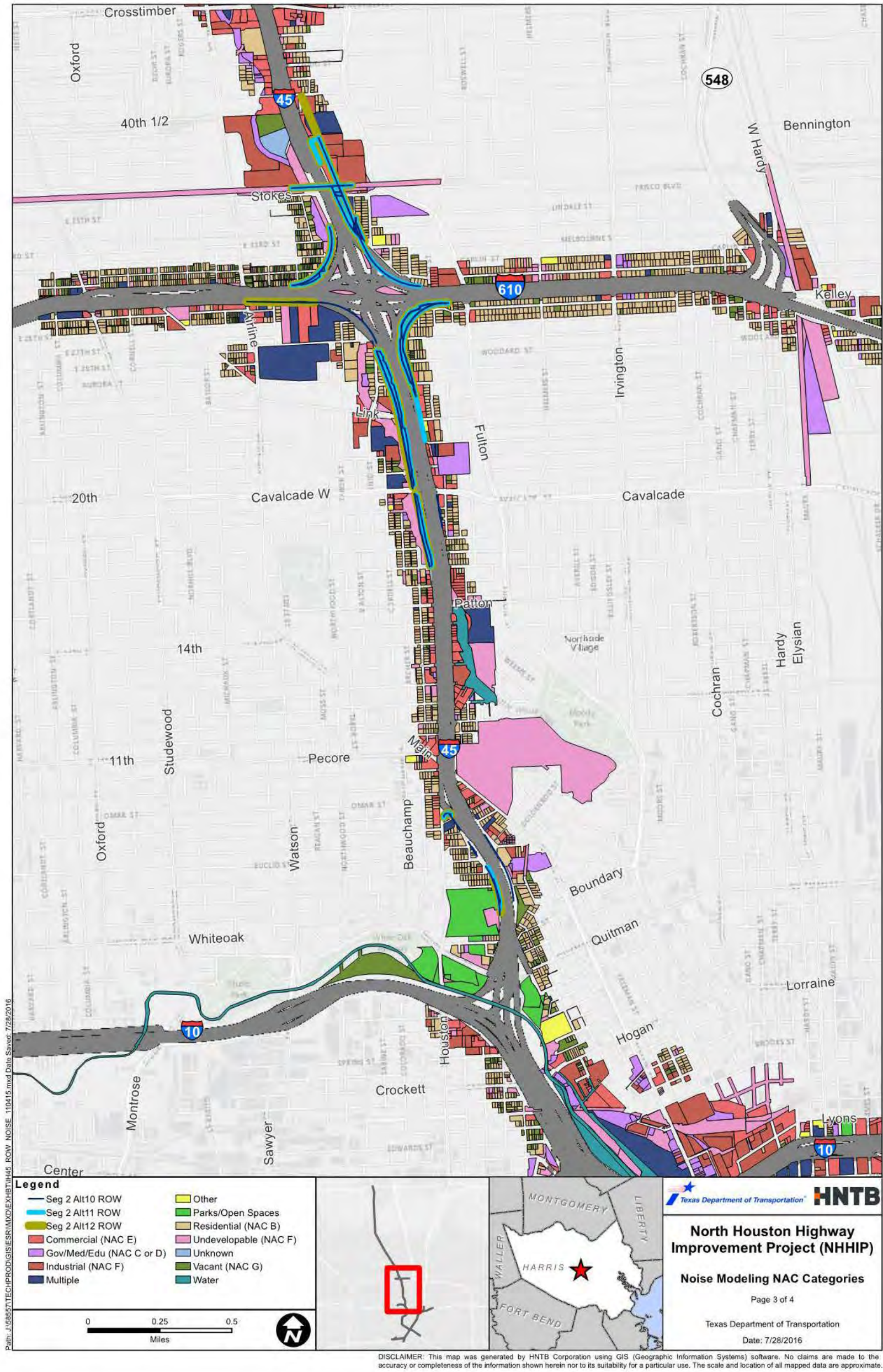
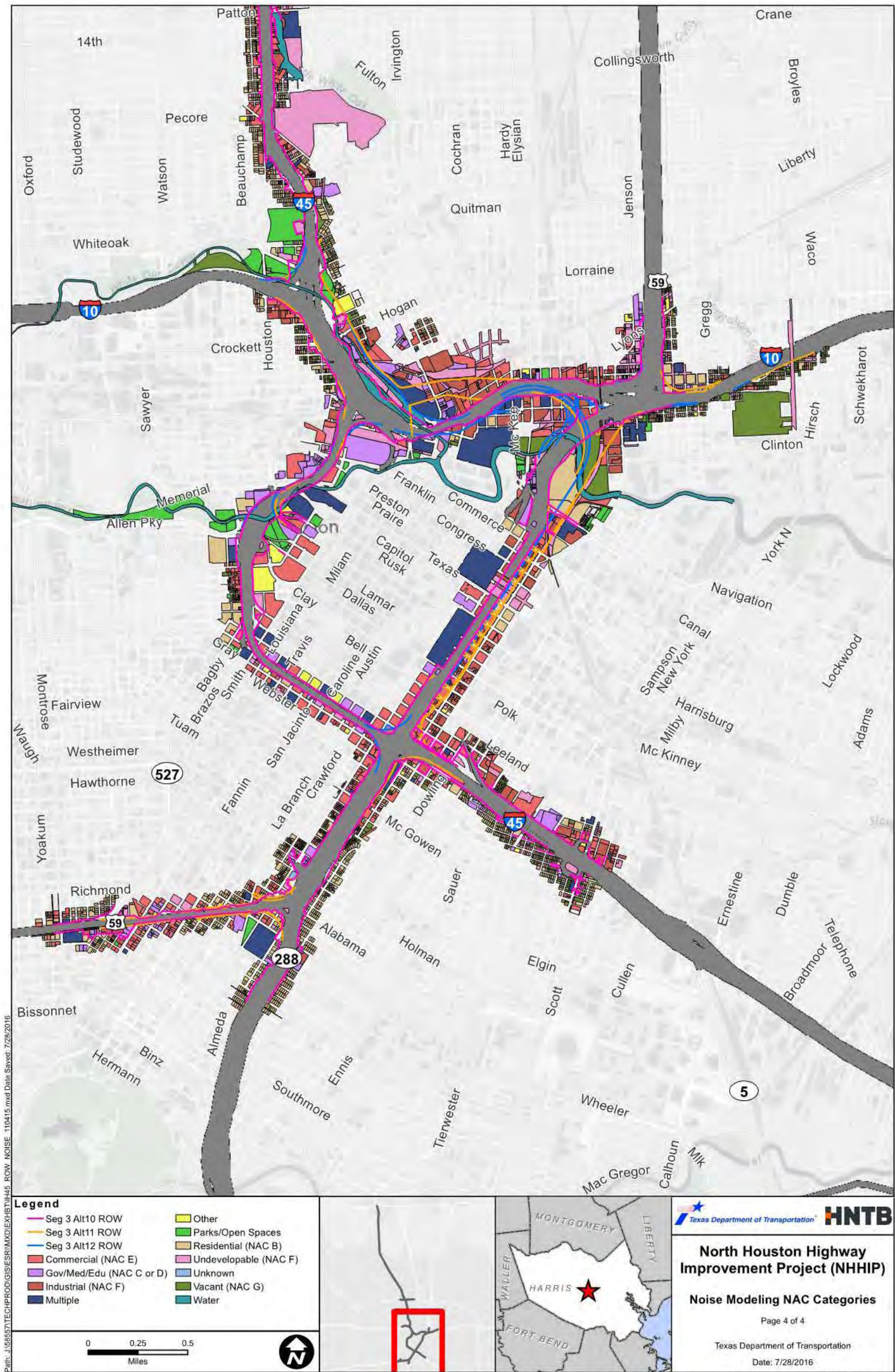


Figure 5: Segment 3 Existing Land Use



4.0 PREDICTED TRAFFIC NOISE LEVELS

FHWA traffic noise modeling software was used to calculate existing and predicted traffic noise levels. The model primarily considers the number, type, and speed of vehicles; highway alignment and grade; cuts, fills, and natural berms; surrounding terrain features; and the locations of activity areas likely to be impacted by the associated traffic noise.

The receivers located adjacent to the reasonable alternatives represent single- and multi-family residences [noise abatement criteria (NAC) B]; schools, places of worship, and public parks/recreation (NAC C and D); and restaurants with outside seating and hotels with swimming pools (NAC E). Additionally, some undeveloped/vacant lands (NAC G) can also be found within the study area.

Existing and predicted traffic noise levels were modeled at receiver locations that represent the land use activity areas adjacent to the proposed project that might be impacted by traffic noise and potentially benefit from feasible and reasonable noise abatement. **Table 5** presents the summary of results which includes the number of receivers modeled, the number of impacted receivers, and the percentage of impacted representative receivers for each alternative. **Tables 6** through **Table 8** present the list of modeled representative receivers and analysis results for each receiver. **Appendix D: Noise Receiver Locations** includes the representative receiver locations and impacts by alternative.

Table 5: Summary of Traffic Noise Analysis Results for the Reasonable Alternatives

Reasonable Alternative	Number of Impacted Representative Receivers	Number of Receivers Modeled	Percent of Impacted Receivers	Percent of Receivers with Noise Reduction (Positive Change)
Segment 1				
Alternative 4	81	129	63%	43%
Alternative 5	85	133	64%	46%
Alternative 7	90	140	64%	26%
Segment 2				
Alternative 10	45	46	98%	22%
Alternative 11	48	49	98%	27%
Alternative 12	48	49	98%	18%
Segment 3				
Alternative 10	91	132	69%	15%
Alternative 11	78	129	60%	35%
Alternative 12	93	129	72%	12%

Table 6: Segment 1 Traffic Noise Levels [dB(A) Leq]

Representative Receiver	Appendix D Sheet No.	NAC Category	NAC dB(A) Leq	Existing (2015)	Reasonable Alternative 4			Reasonable Alternative 5			Reasonable Alternative 7		
					Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)
S1-R1-Apartments	4	B	67	68	62	-6	No	68	0	Yes	69	+1	Yes
S1-R2-House	4	B	67	65	65	0	No	70	+5	Yes	68	+3	Yes
S1-R3-House	4	B	67	68	N/A	N/A	N/A	74	+6	Yes	71	+3	Yes
S1-R4-House	4	B	67	67	67	0	Yes	72	+5	Yes	70	+3	Yes
S1-R5-House	4	B	67	66	65	-1	No	67	+1	Yes	68	+2	Yes
S1-R6-Apartments	4	B	67	67	69	+2	Yes	67	0	Yes	67	0	Yes
S1-R7-Apartments	4	B	67	65	67	+2	Yes	65	0	No	67	+2	Yes
S1-R8-House	4	B	67	65	67	+2	Yes	64	-1	No	65	0	No
S1-R9-House	4	B	67	65	67	+2	Yes	64	-1	No	65	0	No
S1-R10-House	4	B	67	65	67	+2	Yes	64	-1	No	65	0	No
S1-R11-House	4	B	67	69	72	+3	Yes	67	-2	Yes	68	-1	Yes
S1-R12-House	4	B	67	69	72	+3	Yes	67	-2	Yes	67	-2	Yes
S1-R13-House	4	B	67	67	72	+5	Yes	67	0	Yes	67	0	Yes
S1-R14-House	4	B	67	67	65	-2	No	N/A	N/A	N/A	67	0	Yes
S1-R15-House	4	B	67	68	68	0	Yes	71	+3	Yes	68	0	Yes
S1-R16-Apartments	4	B	67	65	63	-2	No	67	+2	Yes	65	0	No
S1-R17-House	4	B	67	68	71	+3	Yes	66	-2	Yes	67	-1	Yes
S1-R18-Apartments	4	B	67	65	63	-2	No	66	+1	Yes	65	0	No
S1-R19-Apartments	4	B	67	66	N/A	N/A	N/A	N/A	N/A	N/A	67	+1	Yes
S1-R20-Church	3	C	67	68	N/A	N/A	N/A	67	-1	Yes	N/A	N/A	N/A
S1-R21-Apartments	3	B	67	68	67	-1	Yes	N/A	N/A	N/A	68	0	Yes
S1-R22-House	3	B	67	69	68	-1	Yes	74	+5	Yes	69	0	Yes
S1-R23-House	3	B	67	67	71	+4	Yes	66	-1	Yes	66	-1	Yes
S1-R24-House	3	B	67	69	N/A	N/A	N/A	67	-2	Yes	67	-2	Yes
S1-R25-House	3	B	67	65	63	-2	No	67	+2	Yes	65	0	No
S1-R26-House	3	B	67	68	72	+4	Yes	67	-1	Yes	67	-1	Yes
S1-R27-House	3	B	67	69	73	+4	Yes	68	-1	Yes	67	-2	Yes
S1-R28-House	3	B	67	69	73	+4	Yes	68	-1	Yes	68	-1	Yes
S1-R29-House	3	B	67	69	69	0	Yes	74	+5	Yes	68	-1	Yes
S1-R30-House	3	B	67	69	67	-2	Yes	72	+3	Yes	68	-1	Yes
S1-R31-House	3	B	67	68	65	-3	No	70	+2	Yes	67	-1	Yes
S1-R32-House	3	B	67	70	67	-3	Yes	75	+5	Yes	69	-1	Yes
S1-R33-House	3	B	67	70	67	-3	Yes	76	+6	Yes	69	-1	Yes
S1-R34-House	3	B	67	65	63	-2	No	66	+1	Yes	65	0	No
S1-R35-Apartment	3	B	67	66	64	-2	No	69	+3	Yes	66	0	Yes
S1-R36-Apartment	3	B	67	66	64	-2	No	67	+1	Yes	65	-1	No
S1-R37-Medical ¹	3	D	52	49	N/A	N/A	N/A	48	-1	No	50	+1	No

Representative Receiver	Appendix D Sheet No.	NAC Category	NAC dB(A) Leq	Existing (2015)	Reasonable Alternative 4			Reasonable Alternative 5			Reasonable Alternative 7		
					Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)
S1-R38-Apartment	3	B	67	64	66	+2	Yes	63	-1	No	65	+1	No
S1-R39-Apartment	3	B	67	63	65	+2	No	62	-1	No	64	+1	No
S1-R40-Hotel	3	E	72	70	N/A	N/A	N/A	69	-1	No	N/A	N/A	N/A
S1-R41-Medical ¹	3	D	52	54	N/A	N/A	N/A	52	-2	Yes	N/A	N/A	N/A
S1-R42-Church ¹	3	D	52	43	44	+1	No	41	-2	No	43	0	No
S1-R43-Church ¹	3	D	52	46	48	+2	No	44	-2	No	46	0	No
S1-R44-Medical ¹	3	D	52	54	N/A	N/A	N/A	51	-3	Yes	N/A	N/A	N/A
S1-R45-Medical ¹	3	D	52	44	N/A	N/A	N/A	44	0	No	45	+1	No
S1-R46-House	3	B	67	63	65	+2	No	62	-1	No	63	0	No
S1-R47-House	3	B	67	62	65	+3	No	62	0	No	63	+1	No
S1-R48-House	3	B	67	64	67	+3	Yes	64	0	No	64	0	No
S1-R49-House	3	B	67	73	N/A	N/A	N/A	71	-2	Yes	71	-2	Yes
S1-R50-House	3	B	67	74	N/A	N/A	N/A	72	-2	Yes	N/A	N/A	N/A
S1-R51-House	3	B	67	73	N/A	N/A	N/A	71	-2	Yes	71	-2	Yes
S1-R52-House	3	B	67	71	N/A	N/A	N/A	69	-2	Yes	69	-2	Yes
S1-R53-House	3	B	67	68	72	+4	Yes	67	-1	Yes	67	-1	Yes
S1-R54-Apartment	3	B	67	66	70	+4	Yes	65	-1	No	66	0	Yes
S1-R55-House	3	B	67	66	N/A	N/A	N/A	65	-1	No	66	0	Yes
S1-R56-House	3	B	67	75	N/A	N/A	N/A	73	-2	Yes	N/A	N/A	N/A
S1-R57-House	3	B	67	73	N/A	N/A	N/A	71	-2	Yes	71	-2	Yes
S1-R58-House	3	B	67	64	65	+1	No	62	-2	No	63	-1	No
S1-R59-Church ¹	3	D	52	56	N/A	N/A	N/A	53	-3	Yes	N/A	N/A	N/A
S1-R60-Hotel	3	E	72	73	N/A	N/A	N/A	71	-2	Yes	N/A	N/A	N/A
S1-R61-House	3	B	67	68	71	+3	Yes	66	-2	Yes	67	-1	Yes
S1-R62-Medical ¹	4	D	52	49	52	+3	Yes	48	-1	No	50	+1	No
S1-R63-House	4	B	67	66	69	+3	Yes	65	-1	No	67	+1	Yes
S1-R64-House	4	B	67	61	63	+2	No	61	0	No	62	+1	No
S1-R65-House	4	B	67	78	N/A	N/A	N/A	75	-3	Yes	N/A	N/A	N/A
S1-R66-House	4	B	67	71	N/A	N/A	N/A	69	-2	Yes	70	-1	Yes
S1-R67-House	4	B	67	71	N/A	N/A	N/A	69	-2	Yes	70	-1	Yes
S1-R68-House	4	B	67	68	71	+3	Yes	66	-2	Yes	67	-1	Yes
S1-R69-Apartment	4	B	67	69	73	+4	Yes	67	-2	Yes	68	-1	Yes
S1-R70-House	4	B	67	66	69	+3	Yes	66	0	Yes	67	+1	Yes
S1-R71-Medical ¹	4	D	52	50	N/A	N/A	N/A	48	-2	No	51	+1	Yes
S1-R72-Apartment	4	B	67	67	68	+1	Yes	66	-1	Yes	68	+1	Yes
S1-R73-Apartment	4	B	67	70	N/A	N/A	N/A	68	-2	Yes	N/A	N/A	N/A
S1-R74-Hotel	4	E	72	73	68	-5	No	73	0	Yes	N/A	N/A	N/A
S1-R75-House	4	B	67	69	N/A	N/A	N/A	N/A	N/A	N/A	72	+3	Yes

Representative Receiver	Appendix D Sheet No.	NAC Category	NAC dB(A) Leq	Existing (2015)	Reasonable Alternative 4			Reasonable Alternative 5			Reasonable Alternative 7		
					Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)
S1-R76-House	4	B	67	68	N/A	N/A	N/A	74	+6	Yes	71	+3	Yes
S1-R77-House	4	B	67	66	66	0	Yes	71	+5	Yes	69	+3	Yes
S1-R78-House	4	B	67	72	N/A	N/A	N/A	N/A	N/A	N/A	73	+1	Yes
S1-R79-House	4	B	67	71	N/A	N/A	N/A	N/A	N/A	N/A	72	+1	Yes
S1-R80-House	4	B	67	71	N/A	N/A	N/A	N/A	N/A	N/A	72	+1	Yes
S1-R81-House	4	B	67	67	66	-1	Yes	70	+3	Yes	69	+2	Yes
S1-R82-House	4	B	67	72	69	-3	Yes	N/A	N/A	N/A	72	0	Yes
S1-R83-House	4	B	67	71	68	-3	Yes	N/A	N/A	N/A	71	0	Yes
S1-R84-House	4	B	67	67	66	-1	Yes	69	+2	Yes	69	+2	Yes
S1-R85-Restaurant	4	E	72	74	71	-3	Yes	N/A	N/A	N/A	N/A	N/A	N/A
S1-R86-Restaurant	4	E	72	75	71	-4	Yes	N/A	N/A	N/A	N/A	N/A	N/A
S1-R87-Apartment	4	B	67	65	63	-2	No	66	+1	Yes	65	0	No
S1-R88-Funeral Home ¹	4	D	52	56	54	-2	Yes	N/A	N/A	N/A	N/A	N/A	N/A
S1-R89-Church ¹	4	D	52	51	50	-1	No	N/A	N/A	N/A	50	-1	No
S1-R90-House	4	B	67	63	62	-1	No	65	+2	No	64	+1	No
S1-R91-Apartment	3	B	67	73	71	-2	Yes	N/A	N/A	N/A	73	0	Yes
S1-R92-Apartment	3	B	67	71	69	-2	Yes	N/A	N/A	N/A	71	0	Yes
S1-R93-House	3	B	67	68	67	-1	Yes	74	+6	Yes	68	0	Yes
S1-R94-House	3	B	67	75	73	-2	Yes	N/A	N/A	N/A	N/A	N/A	N/A
S1-R95-House	3	B	67	76	74	-2	Yes	N/A	N/A	N/A	N/A	N/A	N/A
S1-R96-House	3	B	67	77	74	-3	Yes	N/A	N/A	N/A	N/A	N/A	N/A
S1-R97-House	3	B	67	77	74	-3	Yes	N/A	N/A	N/A	N/A	N/A	N/A
S1-R98-House	3	B	67	69	69	0	Yes	75	+6	Yes	69	0	Yes
S1-R99-House	3	B	67	68	68	0	Yes	73	+5	Yes	68	0	Yes
S1-R100-House	3	B	67	72	71	-1	Yes	N/A	N/A	N/A	70	-2	Yes
S1-R101-House	3	B	67	69	68	-1	Yes	74	+5	Yes	68	-1	Yes
S1-R102-House	3	B	67	69	68	-1	Yes	73	+4	Yes	68	-1	Yes
S1-R103-House	3	B	67	76	72	-4	Yes	N/A	N/A	N/A	N/A	N/A	N/A
S1-R104-House	3	B	67	77	73	-4	Yes	N/A	N/A	N/A	N/A	N/A	N/A
S1-R105-House	3	B	67	71	69	-2	Yes	N/A	N/A	N/A	71	0	Yes
S1-R106-House	3	B	67	70	67	-3	Yes	72	+2	Yes	69	-1	Yes
S1-R107-House	3	B	67	72	70	-2	Yes	N/A	N/A	N/A	72	0	Yes
S1-R108-House	3	B	67	67	65	-2	No	70	+3	Yes	67	0	Yes
S1-R109-House	3	B	67	66	65	-1	No	71	+5	Yes	66	0	Yes
S1-R110-House	3	B	67	63	61	-2	No	68	+5	Yes	62	-1	No
S1-R111-Apartment	3	B	67	64	63	-1	No	69	+5	Yes	63	-1	No
S1-R112-House	3	B	67	73	N/A	N/A	N/A	71	-2	Yes	71	-2	Yes
S1-R113-House	3	B	67	67	70	+3	Yes	66	-1	Yes	66	-1	Yes

Representative Receiver	Appendix D Sheet No.	NAC Category	NAC dB(A) Leq	Existing (2015)	Reasonable Alternative 4			Reasonable Alternative 5			Reasonable Alternative 7		
					Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)
S1-R114-House	2	B	67	65	68	+3	Yes	63	-2	No	65	0	No
S1-R115-House	2	B	67	65	67	+2	Yes	63	-2	No	65	0	No
S1-R116-House	2	B	67	64	67	+3	Yes	63	-1	No	64	0	No
S1-R117-House	2	B	67	64	68	+4	Yes	63	-1	No	65	+1	No
S1-R118-House	2	B	67	64	68	+4	Yes	63	-1	No	64	0	No
S1-R119-House	2	B	67	64	68	+4	Yes	65	+1	No	66	+2	Yes
S1-R120-Restaurant	2	E	72	73	N/A	N/A	N/A	71	-2	Yes	N/A	N/A	N/A
S1-R121-House	2	B	67	64	66	+2	Yes	63	-1	No	65	+1	No
S1-R122-House	2	B	67	64	66	+2	Yes	63	-1	No	65	+1	No
S1-R123-House	2	B	67	68	71	+3	Yes	67	-1	Yes	70	+2	Yes
S1-R124-House	2	B	67	61	62	+1	No	61	0	No	63	+2	No
S1-R125-House	2	B	67	61	62	+1	No	61	0	No	63	+2	No
S1-R126-Church ¹	1	D	52	43	44	+1	No	42	-1	No	44	+1	No
S1-R127-Restaurant	1	E	72	74	N/A	N/A	N/A	72	-2	Yes	75	+1	Yes
S1-R128-Hotel Pool	1	E	72	72	N/A	N/A	N/A	70	-2	No	72	0	Yes
S1-R129-Hotel Pool	1	E	72	71	N/A	N/A	N/A	68	-3	No	69	-2	No
S1-R130-Restaurant	1	E	72	70	70	0	No	N/A	N/A	N/A	71	+1	Yes
S1-R131-Church ¹	1	D	52	53	49	-4	No	N/A	N/A	N/A	51	-2	Yes
S1-R132-House	1	B	67	59	57	-2	No	60	+1	No	59	0	No
S1-R133-House	1	B	67	66	65	-1	No	69	+3	Yes	66	0	Yes
S1-R134-House	1	B	67	65	65	0	No	68	+3	Yes	66	+1	Yes
S1-R135-House	1	B	67	67	66	-1	Yes	70	+3	Yes	67	0	Yes
S1-R136-Church ¹	2	D	52	47	46	-1	No	50	+3	No	47	0	No
S1-R137-House	2	B	67	65	64	-1	No	66	+1	Yes	65	0	No
S1-R138-Church ¹	2	D	52	55	54	-1	Yes	N/A	N/A	N/A	N/A	N/A	N/A
S1-R139-House	2	B	67	67	67	0	Yes	72	+5	Yes	69	+2	Yes
S1-R140-House	2	B	67	66	66	0	Yes	70	+4	Yes	67	+1	Yes
S1-R141-House	2	B	67	68	68	0	Yes	74	+6	Yes	70	+2	Yes
S1-R142-House	2	B	67	66	65	-1	No	68	+2	Yes	67	+1	Yes
S1-R143-Restaurant	2	E	72	74	74	0	Yes	N/A	N/A	N/A	N/A	N/A	N/A
S1-R144-House	2	B	67	68	68	0	Yes	71	+3	Yes	69	+1	Yes
S1-R145-House	2	B	67	68	69	+1	Yes	73	+5	Yes	69	+1	Yes
S1-R146-House	2	B	67	68	69	+1	Yes	73	+5	Yes	68	0	Yes
S1-R147-House	2	B	67	66	66	0	Yes	69	+3	Yes	66	0	Yes
S1-R148-House	2	B	67	68	67	-1	Yes	N/A	N/A	N/A	68	0	Yes
S1-R149-Restaurant	1	E	72	66	N/A	N/A	N/A	70	+4	No	72	+6	Yes
S1-R150-Restaurant	1	E	72	72	N/A	N/A	N/A	70	-2	No	72	0	Yes
S1-R151-Restaurant	1	E	72	73	N/A	N/A	N/A	71	-2	Yes	72	-1	Yes

Representative Receiver	Appendix D Sheet No.	NAC Category	NAC dB(A) Leq	Existing (2015)	Reasonable Alternative 4			Reasonable Alternative 5			Reasonable Alternative 7		
					Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)
S1-R152-Apartment	1	B	67	64	65	+1	No	64	0	No	65	+1	No
S1-R153-partment	1	B	67	64	65	+1	No	65	+1	No	65	+1	No
S1-R154-Condo Pool	1	C	67	60	62	+2	No	61	+1	No	62	+2	No
S1-R155-Hotel Pool	1	E	72	56	59	+3	No	57	+1	No	59	+3	No
S1-R156-Apartment	1	B	67	61	63	+2	No	61	0	No	62	+1	No
S1-R157-Restaurant	1	E	72	68	70	+2	No	N/A	N/A	N/A	70	+2	No
S1-R158-Apartment	1	B	67	62	64	+2	No	66	+4	Yes	65	+3	No
S1-R159-Apartment	1	B	67	57	59	+2	No	60	+3	No	59	+2	No
S1-R160-Apartment	1	B	67	55	57	+2	No	58	+3	No	57	+2	No
S1-R161-Restaurant	1	E	72	74	74	0	Yes	N/A	N/A	N/A	N/A	N/A	N/A
S1-R162-School ¹	1	D	52	53	52	-1	Yes	N/A	N/A	N/A	N/A	N/A	N/A
S1-R163-School Outdoor	1	C	67	67	67	0	Yes	72	+5	Yes	70	+3	Yes
S1-R164-Little White Oak Trail	4	C	67	63	61	-2	No	65	+2	No	65	+2	No
S1-R165-OsborneElem	2	C	67	57	58	+1	No	58	+1	No	59	+2	No

Source: Study Team (May 2016).

Notes: N/A Represents receivers to be potentially displaced.

1. A reduction factor of 20 dB(A) was applied to traffic noise levels to determine interior noise levels.

Table 7: Segment 2 Traffic Noise Levels [dB(A) Leq]

Representative Receiver	Appendix D Sheet No.	NAC Category	NAC dB(A) Leq	Existing (2015)	Reasonable Alternative 10			Reasonable Alternative 11			Reasonable Alternative 12		
					Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)
S2-R1-House	1	B	67	67	70	+3	Yes	70	+3	Yes	70	+3	Yes
S2-R2-House	1	B	67	69	71	+2	Yes	72	+3	Yes	72	+3	Yes
S2-R3-House	2	B	67	71	70	-1	Yes	71	0	Yes	72	+1	Yes
S2-R5-Motel Pool	2	C	67	64	66	+2	Yes	67	+3	Yes	67	+3	Yes
S2-R6-House	2	B	67	64	66	+2	Yes	67	+3	Yes	67	+3	Yes
S2-R7-House	2	B	67	67	67	0	Yes	69	+2	Yes	69	+2	Yes
S2-R8-House	2	B	67	71	70	-1	Yes	70	-1	Yes	70	-1	Yes
S2-R9-House	2	B	67	67	68	+1	Yes	68	+1	Yes	68	+1	Yes
S2-R10-House	2	B	67	71	73	+2	Yes	70	-1	Yes	73	+2	Yes
S2-R11-Office	2	E	72	75	73	-2	Yes	72	-3	Yes	73	-2	Yes
S2-R12-House	2	B	67	71	72	+1	Yes	72	+1	Yes	72	+1	Yes
S2-R13-Prime Texas Properties Office	2	E	72	70	76	+6	Yes	71	+1	Yes	72	+2	Yes
S2-R14-House	2	B	67	67	75	+8	Yes	70	+3	Yes	75	+8	Yes
S2-R15-House	2	B	67	69	78	+9	Yes	71	+2	Yes	74	+5	Yes
S2-R16-House	3	B	67	66	73	+7	Yes	69	+3	Yes	69	+3	Yes
S2-R17-House	3	B	67	73	74	+1	Yes	69	-4	Yes	69	-4	Yes
S2-R18-House	3	B	67	72	72	0	Yes	74	+2	Yes	74	+2	Yes
S2-R19-House	3	B	67	75	74	-1	Yes	76	+1	Yes	77	+2	Yes
S2-R20-Woodland Park Ball Field	3	C	67	69	70	+1	Yes	70	+1	Yes	70	+1	Yes
S2-R22-House	3	B	67	72	73	+1	Yes	71	-1	Yes	71	-1	Yes
S2-R23-House ¹	3	B	67	71	71	+1	Yes	70	-1	Yes	71	0	Yes
S2-R24-Multi-Family Pool ¹	3	C	67	69	68	-1	Yes	69	0	Yes	70	+1	Yes
S2-R25 Adath Emeth Cemetery	1	C	67	73	71	-2	Yes	72	-1	Yes	71	-2	Yes
S2-R26-Jack in the Box Restaurant	1	E	72	71	73	+2	Yes	73	+2	Yes	73	+2	Yes
S2-R27-House	1	B	67	70	70	0	Yes	71	+1	Yes	71	+1	Yes
S2-R28-House	1	B	67	71	72	+1	Yes	72	+1	Yes	72	+1	Yes
S2-R29-House	1	B	67	67	70	+3	Yes	69	+2	Yes	69	+2	Yes
S2-R30-House	1	B	67	68	69	+1	Yes	68	0	Yes	68	0	Yes
S2-R31-Roosevelt School Playground	1	C	67	62	65	+3	No	64	+2	No	65	+3	No
S2-R32-House	1	B	67	68	69	+1	Yes	68	0	Yes	71	+3	Yes
S2-R33-House	1	B	67	69	70	+1	Yes	69	0	Yes	69	0	Yes
S2-R34-House	1	B	67	70	69	-1	Yes	69	-1	Yes	69	-1	Yes
S2-R35-House	1	B	67	71	73	+2	Yes	72	+1	Yes	74	+3	Yes
S2-R36-House	1	B	67	73	N/A	N/A	N/A	72	-1	Yes	72	-1	Yes
S2-R37-House	1	B	67	67	69	+2	Yes	69	+2	Yes	69	+2	Yes
S2-R38-House	1	B	67	70	70	0	Yes	71	+1	Yes	72	+2	Yes

Representative Receiver	Appendix D Sheet No.	NAC Category	NAC dB(A) Leq	Existing (2015)	Reasonable Alternative 10			Reasonable Alternative 11			Reasonable Alternative 12		
					Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)
S2-R39-House	2	B	67	68	67	-1	Yes	69	+1	Yes	69	+1	Yes
S2-R40-Jefferson Elem Playground	2	C	67	68	68	0	Yes	70	+2	Yes	69	+1	Yes
S2-R41-Jefferson Elem Playfield	2	C	67	68	68	0	Yes	69	+1	Yes	69	+1	Yes
S2-R42-House	2	B	67	69	69	0	Yes	70	+1	Yes	70	+1	Yes
S2-R43-House	2	B	67	72	72	0	Yes	74	+2	Yes	74	+2	Yes
S2-R44-House	2	B	67	74	71	-3	Yes	72	-2	Yes	72	-2	Yes
S2-R45-Luxury Inn Motel	2	E	72	74	N/A	N/A	N/A	71	-3	Yes	71	-3	Yes
S2-R46-Multi-Family	2	B	67	70	70	0	Yes	71	+1	Yes	71	+1	Yes
S2-R47-Historic Hollywood Cemetery	2	C	67	67	67	0	Yes	71	+4	Yes	76	+9	Yes
S2-R48-House	3	B	67	69	70	+1	Yes	70	+1	Yes	71	+2	Yes
S2-R49-House	3	B	67	70	70	0	Yes	71	+1	Yes	71	+1	Yes
S2-R50-House	3	B	67	77	N/A	N/A	N/A	76	-1	Yes	78	+1	Yes
S2-R51-House	3	B	67	74	73	-1	Yes	70	-4	Yes	74	0	Yes

Source: Study Team (May 2016).

Notes: 1. Receiver modeled as part of the Segment 3 analysis because of proximity to the I-10/I-45 interchange which is included in Segment 3. The receivers are illustrated in the Segment 2 exhibits.

N/A Represents receiver displacement.

Table 8: Segment 3 Traffic Noise Levels [dB(A) Leq]

Representative Receiver	Appendix D Sheet No.	NAC Category	NAC dB(A) Leq	Existing (2015)	Reasonable Alternative 10			Reasonable Alternative 11			Reasonable Alternative 12		
					Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)
S3-R001_House	1	B	67	70	70	0	Yes	71	+1	Yes	72	+2	Yes
S3- R003_House	1	B	67	73	73	0	Yes	73	0	Yes	74	+1	Yes
S3-R004_House	1	B	67	65	66	+1	Yes	66	+1	Yes	67	+2	Yes
S3-R005_Community Center	1	C	67	67	69	+2	Yes	68	+1	Yes	72	+5	Yes
S3-R006_House	1	B	67	65	64	-1	No	66	+1	Yes	70	+5	Yes
S3-R007_Medical	1	C	67	63	65	+2	No	64	+1	No	68	+5	Yes
S3-R008_House	1	B	67	62	67	+5	Yes	65	+3	No	69	+7	Yes
S3-R009_House	1	B	67	62	67	+5	Yes	64	+2	No	69	+7	Yes
S3-R010_House	1	B	67	74	73	-1	Yes	74	0	Yes	75	+1	Yes
S3-R011_House	1	B	67	71	73	+2	Yes	73	+2	Yes	73	+2	Yes
S3-R012_House	1	B	67	69	71	+2	Yes	71	+2	Yes	70	+1	Yes
S3-R013_House	1	B	67	70	71	+1	Yes	72	+2	Yes	71	+1	Yes
S3-R014_American Statesmanship Park	1	C	67	74	72	-2	Yes	71	-3	Yes	73	-1	Yes
S3-R015_House	1	B	67	71	72	+1	Yes	72	+1	Yes	71	0	Yes
S3-R016_House	1	B	67	67	67	0	Yes	68	+1	Yes	68	+1	Yes
S3-R017_Church ¹	1	D	52	50	48	-2	No	49	-1	No	50	0	No
S3-R018_Aquarium	6	C	67	72	73	+1	Yes	71	-1	Yes	72	0	Yes
S3-R019_Park	6	C	67	73	74	+1	Yes	72	-1	Yes	73	0	Yes
S3-R020_Apartments	6	B	67	64	68	+4	Yes	63	-1	No	66	+2	Yes
S3-R021_Buffalo Bayou	6	C	67	62	67	+5	Yes	61	-1	No	63	+1	No
S3-R022_Restaurant	6	E	72	67	69	+2	No	64	-3	No	68	+1	No
S3-R023_House	6	B	67	70	73	+3	Yes	66	-4	Yes	70	0	Yes
S3-R024_Apartment	6	B	67	70	72	+2	Yes	66	-4	Yes	70	0	Yes
S3-R025_House	6	B	67	63	64	+1	No	56	-7	No	62	-1	No
S3-R026_Restaurant	6	E	72	69	71	+2	Yes	68	-1	No	67	-2	No
S3-R027_Park	6	C	67	63	64	+1	No	54	-9	No	62	-1	No
S3-R028_Church ¹	6	D	52	51	52	+1	Yes	24	-27	No	50	-1	No
S3-R029_Church ¹	6	D	52	50	54	+4	Yes	39	-11	No	51	+1	Yes
S3-R030_House	4	B	67	69	69	0	Yes	67	-2	Yes	69	0	Yes
S3-R031_Apartments	6	B	67	70	73	+3	Yes	63	-7	No	71	+1	Yes
S3-R032_Church ¹	4	D	52	49	48	-1	No	47	-2	No	50	+1	No
S3-R033_House	4	B	67	70	69	-1	Yes	67	-3	Yes	71	+1	Yes
S3-R034_House	4	B	67	71	71	0	Yes	69	-2	Yes	71	0	Yes
S3-R035_Apartments	4	B	67	70	69	-1	Yes	68	-2	Yes	69	-1	Yes
S3-R037_Baldwin Park	4	B	67	68	68	0	Yes	67	-1	Yes	68	0	Yes

Representative Receiver	Appendix D Sheet No.	NAC Category	NAC dB(A) Leq	Existing (2015)	Reasonable Alternative 10			Reasonable Alternative 11			Reasonable Alternative 12		
					Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)
S3-R036_ House	5	C	67	62	63	+1	No	63	+1	No	63	+1	No
S3-R038_ School ¹	5	D	52	46	48	+2	No	49	+3	No	48	+2	No
S3-R039_ Playground	5	C	67	69	71	+2	Yes	71	+2	Yes	71	+2	Yes
S3-R040_ Apartment	5	B	67	68	70	+2	Yes	70	+2	Yes	71	+3	Yes
S3-R041_ Community Center ¹	5	D	52	51	54	+3	Yes	49	-2	No	54	+3	Yes
S3-R042_ House	5	B	67	74	75	+1	Yes	67	-7	Yes	74	0	Yes
S3-R043_ House	5	B	67	74	77	+3	Yes	69	-5	Yes	77	+3	Yes
S3-R044_ House	5	B	67	73	74	+1	Yes	75	+2	Yes	74	+1	Yes
S3-R045_ Peggy’s Point Plaza	5	C	67	63	64	+1	No	62	-1	No	64	+1	No
S3-R046_ House	5	B	67	72	73	+1	Yes	69	-3	Yes	72	0	Yes
S3-R047_ House	5	B	67	75	76	+1	Yes	72	-3	Yes	76	+1	Yes
S3-R048_ House	5	B	67	76	78	+2	Yes	78	+2	Yes	78	+2	Yes
S3-R049_ Restaurant	5	E	72	70	73	+3	Yes	73	+3	Yes	73	+3	Yes
S3-R050_ Restaurant	5	E	72	74	75	+1	Yes	75	+1	Yes	76	+2	Yes
S3-R051_ Apartments	5	B	67	71	73	+2	Yes	73	+2	Yes	74	+3	Yes
S3-R052_ Apartments	5	B	67	67	69	+2	Yes	70	+3	Yes	69	+2	Yes
S3-R053_ House	5	B	67	70	70	0	Yes	70	0	Yes	71	+1	Yes
S3-R054_ School	5	E	72	68	67	-1	No	69	+1	No	67	-1	No
S3-R055_ House	5	B	67	73	73	0	Yes	75	+2	Yes	73	0	Yes
S3-R056_ House	5	B	67	74	75	+1	Yes	76	+2	Yes	75	+1	Yes
S3-R057_ House	5	B	67	72	76	+4	Yes	76	+4	Yes	76	+4	Yes
S3-R058_ Peggy Park	5	C	67	67	68	+1	Yes	68	+1	Yes	69	+2	Yes
S3-R059_ School	5	C	67	63	65	+2	No	65	+2	No	65	+2	No
S3-R060_ House	5	B	67	66	66	0	Yes	68	+2	Yes	67	+1	Yes
S3-R061_ House	5	B	67	66	67	+1	Yes	66	0	Yes	68	+2	Yes
S3-R062_ House	5	B	67	66	67	+1	Yes	66	0	Yes	68	+2	Yes
S3-R063_ House	5	B	67	66	67	+1	Yes	71	+5	Yes	68	+2	Yes
S3-R064_ House	5	B	67	67	67	0	Yes	71	+4	Yes	68	+1	Yes
S3-R065_ House	5	B	67	66	65	-1	No	68	+2	Yes	65	-1	No
S3-R066_ House	5	B	67	66	64	-2	No	70	+4	Yes	65	-1	No
S3-R067_ House	5	B	67	67	66	-1	Yes	71	+4	Yes	66	-1	Yes
S3-R068_ Church ¹	5	D	52	50	51	+1	Yes	50	0	No	51	+1	Yes
S3-R069_ Apartments	5	B	67	67	69	+2	Yes	69	+2	Yes	70	+3	Yes
S3-R070_ House	4	B	67	69	68	-1	Yes	68	-1	Yes	69	0	Yes
S3-R071_ House	4	B	67	71	70	-1	Yes	70	-1	Yes	71	0	Yes
S3-R072_ House	4	B	67	71	70	-1	Yes	70	-1	Yes	70	-1	Yes

Representative Receiver	Appendix D Sheet No.	NAC Category	NAC dB(A) Leq	Existing (2015)	Reasonable Alternative 10			Reasonable Alternative 11			Reasonable Alternative 12		
					Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)
S3-R073_House	4	B	67	65	65	0	No	64	-1	No	65	0	No
S3-R074_Apartment	4	B	67	71	70	-1	Yes	70	-1	Yes	71	0	Yes
S3-R075_House	4	B	67	69	67	-2	Yes	67	-2	Yes	69	0	Yes
S3-R076_House	4	B	67	66	65	-1	No	N/A	N/A	N/A	68	+2	Yes
S3-R077_House	4	B	67	64	65	+1	No	66	+2	Yes	66	+2	Yes
S3-R078_House	4	B	67	63	65	+2	No	64	+1	No	66	+3	Yes
S3-R079_Apartment	4	B	67	64	66	+2	Yes	67	+3	Yes	67	+3	Yes
S3-R080_House	4	B	67	64	68	+4	Yes	68	+4	Yes	68	+4	Yes
S3-R081_House	4	B	67	65	65	0	No	68	+3	Yes	65	0	No
S3-R082_House	4	B	67	61	61	0	No	63	+2	No	60	-1	No
S3-R083_Apartments	6	B	67	65	N/A	N/A	N/A	62	-3	No	N/A	N/A	N/A
S3-R084_Apartment	2	B	67	64	65	+1	No	62	-2	No	66	+2	Yes
S3-R085_Apartment	2	B	67	65	66	+1	Yes	63	-2	No	67	+2	Yes
S3-R086_Restaurant	2	E	72	69	70	+1	No	N/A	N/A	N/A	N/A	N/A	N/A
S3-R087_Restaurant	2	E	72	72	73	+1	Yes	N/A	N/A	N/A	N/A	N/A	N/A
S3-R088_Apartments	2	B	67	72	72	0	Yes	62	-10	No	74	+2	Yes
S3-R089_Apartments	2	B	67	62	62	0	No	62	0	No	64	+2	No
S3-R090_Apartment	2	B	67	67	66	-1	Yes	N/A	N/A	N/A	N/A	N/A	N/A
S3-R091_James Bute Park	2	C	67	58	60	+2	No	59	+1	No	65	+7	No
S3-R092_House	2	B	67	64	66	+2	Yes	65	+1	No	69	+5	Yes
S3-R093_Apartment	2	B	67	67	69	+2	Yes	59	-8	No	71	+4	Yes
S3-R094_University	2	C	67	66	67	+1	Yes	60	-6	No	69	+3	Yes
S3-R095_House	2	B	67	66	67	+1	Yes	69	+3	Yes	69	+3	Yes
S3-R096_Church ¹	3	D	52	47	47	0	No	49	+2	No	48	+1	No
S3-R097_Apartments	3	B	67	68	68	0	Yes	69	+1	Yes	69	+1	Yes
S3-R098_House	3	B	67	68	69	+1	Yes	69	+1	Yes	69	+1	Yes
S3-R099_House	3	B	67	69	72	+3	Yes	70	+1	Yes	71	+2	Yes
S3-R100_House	3	B	67	67	68	+1	Yes	67	0	Yes	68	+1	Yes
S3-R101_House	3	B	67	71	72	+1	Yes	73	+2	Yes	73	+2	Yes
S3-R102_Church ¹	3	D	52	49	47	-2	No	47	-2	No	48	-1	No
S3-R103_Church ¹	3	D	52	50	52	+2	Yes	53	+3	Yes	53	+3	Yes
S3-R104_House	3	B	67	70	74	+4	Yes	76	+6	Yes	74	+4	Yes
S3-R105_School	3	C	67	65	68	+3	Yes	69	+4	Yes	68	+3	Yes
S3-R106_Senior Center ¹	3	D	52	46	48	+2	No	49	+3	No	49	+3	No
S3-R107_House	3	B	67	67	72	+5	Yes	72	+5	Yes	73	+6	Yes
S3-R108_House	3	B	67	68	70	+2	Yes	70	+2	Yes	70	+2	Yes

Representative Receiver	Appendix D Sheet No.	NAC Category	NAC dB(A) Leq	Existing (2015)	Reasonable Alternative 10			Reasonable Alternative 11			Reasonable Alternative 12		
					Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)	Predicted (2035)	Change (+/-)	Noise Impact (Yes/No)
S3-R109_ Park	3	C	67	70	70	0	Yes	73	+3	Yes	73	+3	Yes
S3-R110_ Apartments	3	B	67	66	67	+1	Yes	68	+2	Yes	68	+2	Yes
S3-R111_ Apartments	3	B	67	68	68	0	Yes	68	0	Yes	69	+1	Yes
S3-R112_ House	3	B	67	68	68	0	Yes	68	0	Yes	68	0	Yes
S3-R113_ Church ¹	3	D	52	49	49	0	No	50	+1	No	49	0	No
S3-R114_ Freed Art and Nature Park	1	C	67	65	68	+3	Yes	67	+2	Yes	68	+3	Yes
S3-R115_ Hogg Park	1	C	67	69	66	-3	Yes	69	0	Yes	71	+2	Yes
S3-R117_ Linear Park	6	C	67	70	70	0	Yes	70	0	Yes	71	+1	Yes
S3-R118_ Sam Houston Park	6	C	67	64	65	+1	No	64	0	No	66	+2	Yes
S3-R119_ Tranquility Park	6	C	67	59	60	+1	No	58	-1	No	58	-1	No
S3-R120_ Emancipation Park	4	C	67	57	57	0	No	58	+1	No	58	+1	No
S3-R121_ Discovery Green	2	C	67	54	55	+1	No	55	+1	No	56	+2	No
S3-R122_ Guadalupe Plaza	2	C	67	54	55	+1	No	60	+6	No	58	+4	No
S3-R123_ Buffalo Bayou Trail	2	C	67	55	55	0	No	62	+7	No	58	+3	No
S3-R124_ Swiney Park	3	C	67	64	65	+1	No	65	+1	No	65	+1	No
S3-R125_ Hennessy Park	2	C	67	63	66	+3	Yes	67	+4	Yes	66	+3	Yes
S3-R126_ Allen’s Landing Memorial Park	2	C	67	57	59	+2	No	55	-2	No	60	+3	No
S3-R127_ Confederate Ship Area	2	C	67	59	61	+2	No	56	-3	No	63	+4	No
S3-R128_ Goyen Park	2	C	67	65	70	+5	Yes	59	-6	No	72	+7	Yes
S3-R129_ Woodland Park	1	C	67	61	63	+2	No	63	+2	No	64	+3	No
S3-R130_ Brewster Park	3	C	67	67	69	+2	Yes	67	0	Yes	66	-1	Yes
R131_NAC_B_Midway Development Apartments	3	B	67	55	56	+1	No	58	+3	No	56	+1	No
R132_NAC_B_Hardy Yards Apartments	2	B	67	56	58	+2	No	65	+9	No	60	+4	No
R133_NAC_C_Park	6	C	67	60	64	+4	No	63	+3	No	61	+1	No
R134_NAC_C_Park	6	C	67	68	70	+2	Yes	68	0	Yes	67	-1	Yes
R135_NAC_B_Apartments (Cheek Neal)	2	B	67	70	70	0	Yes	68	-2	Yes	72	+2	Yes

Source: Study Team (May 2016).

Notes: N/A Represents receiver displacement.

1. A reduction factor of 20 dB(A) was applied to traffic noise levels to determine interior noise levels.

As indicated in **Tables 6 through 8**, each reasonable alternative evaluated would result in traffic noise impacts. **Table 5** includes the number of receivers impacted by each alternative and the percent of impacted receivers. Residential noise receivers located throughout the study area are anticipated to experience noise impacts under the absolute criterion (i.e., approach, equal or exceed existing noise levels in 2035) for all of the proposed build alternatives. Additionally, the proposed alternatives would result in traffic noise impacts at other land use areas including, parks, churches, and schools. Results also indicate that when compared to existing noise levels, predicted noise would be reduced at many receivers. This could be attributed to the proposed shift of horizontal and/or vertical alignment change of the alternatives. The percentage of the receivers for which there would be a noise reduction is included in **Table 5**.

The following noise abatement measures were considered: traffic management, alteration of horizontal and/or vertical alignments, acquisition of undeveloped property to act as a buffer zone and the construction of noise walls.

Before any abatement measure can be proposed for incorporation into the project, it must be both feasible and reasonable. In order to be "feasible," the abatement measure must be able to reduce the noise level at greater than 50 percent of impacted, first row receivers by at least 5 dB(A); and to be "reasonable," it must not exceed the cost-effectiveness criterion of \$25,000 for each receiver that would benefit by a reduction of at least 5 dB(A) and the abatement measure must be able to reduce the noise level at least one impacted, first row receiver by at least 7 dB(A).

Traffic management: Control devices could be used to reduce the speed of the traffic; however, the minor benefit of 1 dB(A) per 5 mph reduction in speed does not outweigh the associated increase in congestion and air pollution. Other measures such as time or use restrictions for certain vehicles are prohibited on state highways.

Alteration of horizontal and/or vertical alignments: Any alteration of the existing alignment would displace existing businesses and residences, require additional ROW and not be cost effective/reasonable.

Buffer zone: The acquisition of undeveloped property to act as a buffer zone is designed to avoid rather than abate traffic noise impacts and, therefore, is not feasible.

Noise barriers: this is the most commonly used noise abatement measure. Noise barriers were evaluated for the impacted receiver locations. **Section 5** presents the traffic noise barrier evaluation conducted for the NHHIP DEIS.

5.0 EVALUATION OF NOISE ABATEMENT

A qualitative evaluation of the potential for reasonable and feasible traffic noise barriers, as the most commonly used abatement measure, was conducted for the three reasonable alternatives. This evaluation was conducted using the results of the TNM alternative evaluation and predicted traffic noise levels, impacted receiver locations, surrounding land use, configuration of the highway and existing/proposed access points, and the following assumptions:

- Traffic noise barriers would be placed on TxDOT ROW.
- Traffic noise barriers would be located along the outside of the frontage road/ROW where barriers could be continuous, without gaps for driveways or streets.
- Traffic noise barriers could also be located in between mainlanes and frontage roads.
- Receivers that represent blocks primarily composed of first row residences would be considered for potential feasible and reasonable abatement. Blocks of large lot residences were evaluated based on cost/benefitted receiver: when the block was composed of mixed development, traffic noise barriers were considered potentially feasible and reasonable when there was more than 50 percent residential land use, otherwise abatement was not considered feasible and reasonable. Potential for commercial development was also considered in the evaluation. Receivers that represent a second row of residences that are separated by a first row of commercial use would not be considered for potential reasonable and feasible abatement because the traffic noise barrier is considered undesirable for first row commercial property owners unless the commercial properties provide frequently used human outdoor activity areas such as hotel pools or restaurant patios.
- Traffic noise barriers for receivers that represent a single residential parcel would not be considered feasible and reasonable abatement.
- Receivers that represent multi-family residences (apartments) would be considered for traffic noise barriers due to number of units or number of swimming pool users.
- Receivers that represent hotel pools and restaurant patios were considered for potential reasonable and feasible abatement.
- Receivers that represent NAC C uses would be considered for potential reasonable and feasible abatement.
- Receivers that represent NAC D uses would be considered for potential reasonable and feasible abatement.

Table 9 presents the summary of abatement for each alternative. **Table 10** through **Table 12** presents the traffic noise assessment for each receiver per alternative. A quantitative examination of the potential mitigation measures and specific proposed mitigation details (i.e., noise barrier dimensions, cost, etc.) for the project will be determined and proposed for the preferred alternative during preparation of the FEIS.

Table 9: Number of Receivers that would Potentially Benefit from Traffic Noise Barriers per Alternative

Reasonable Alternative	Number of Impacted Representative Receivers	Number of Receivers Modeled	Number of Receivers Potentially Benefitted from Traffic Noise Barrier	Percent of Receivers Potentially Benefitted from Traffic Noise Barriers
Segment 1				
Alternative 4	81	129	72	89%
Alternative 5	85	133	76	89%
Alternative 7	90	140	82	91%
Segment 2				
Alternative 10	45	46	26	58%
Alternative 11	48	49	28	58%
Alternative 12	48	49	28	58%
Segment 3				
Alternative 10	91	132	66	73%
Alternative 11	78	129	60	77%
Alternative 12	93	129	69	74%

Source: Study Team (October 2016).

Table 10: Segment 1 Potential Noise Abatement Evaluation

Representative Receiver	Reasonable Alternative 4		Reasonable Alternative 5		Reasonable Alternative 7	
	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)
S1-R1-Apartments	No	--	Yes	Yes	Yes	Yes
S1-R2-House	No	--	Yes	Yes	Yes	Yes
S1-R3-House	N/A	--	Yes	Yes	Yes	Yes
S1-R4-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R5-House	No	--	Yes	Yes	Yes	Yes
S1-R6-Apartments	Yes	Yes	Yes	Yes	Yes	Yes
S1-R7-Apartments	Yes	Yes	No	--	Yes	Yes
S1-R8-House	Yes	Yes	No	--	No	--
S1-R9-House	Yes	Yes	No	--	No	--
S1-R10-House	Yes	Yes	No	--	No	--
S1-R11-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R12-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R13-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R14-House	No	--	N/A	--	Yes	Yes
S1-R15-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R16-Apartments	No	--	Yes	Yes	No	--
S1-R17-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R18-Apartments	No	--	Yes	Yes	No	--
S1-R19-Apartments	N/A	--	N/A	--	Yes	Yes
S1-R20-Church	N/A	--	Yes	Yes	N/A	--
S1-R21-Apartments	Yes	Yes	N/A	--	Yes	Yes
S1-R22-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R23-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R24-House	N/A	--	Yes	Yes	Yes	Yes
S1-R25-House	No	--	Yes	Yes	No	--
S1-R26-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R27-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R28-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R29-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R30-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R31-House	No	--	Yes	Yes	Yes	Yes
S1-R32-House	Yes	Yes	Yes	Yes	Yes	Yes

Representative Receiver	Reasonable Alternative 4		Reasonable Alternative 5		Reasonable Alternative 7	
	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)
S1-R33-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R34-House	No	--	Yes	Yes	No	--
S1-R35-Apartments	No	--	Yes	Yes	Yes	Yes
S1-R36-Apartments	No	--	Yes	Yes	No	--
S1-R37-Medical ¹	N/A	--	No	--	No	--
S1-R38-Apartments	Yes	No	No	--	No	--
S1-R39-Apartments	Not Impacted					
S1-R40-Hotel	N/A	--	No	--	N/A	--
S1-R41-Medical ¹	N/A	--	Yes	No	N/A	--
S1-R42-Church ¹	Not Impacted					
S1-R43-Church ¹	Not Impacted					
S1-R44-Medical ¹	N/A	--	Yes	No	N/A	--
S1-R45-Medical ¹	N/A	--	No	--	No	--
S1-R46-House	Not Impacted					
S1-R47-House	Not Impacted					
S1-R48-House	Yes	Yes	No	--	No	--
S1-R49-House	N/A	--	Yes	Yes	Yes	Yes
S1-R50-House	N/A	--	Yes	No	N/A	--
S1-R51-House	N/A	--	Yes	Yes	Yes	Yes
S1-R52-House	N/A	--	Yes	Yes	Yes	Yes
S1-R53-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R54-Apartments	Yes	Yes	No	--	Yes	Yes
S1-R55-House	N/A	--	No	--	Yes	Yes
S1-R56-House	N/A	--	Yes	No	N/A	--
S1-R57-House	N/A	--	Yes	Yes	Yes	Yes
S1-R58-House	Not Impacted					
S1-R59-Church ¹	N/A	--	Yes	No	N/A	--
S1-R60-Hotel	N/A	--	Yes	No	N/A	--
S1-R61-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R62-Medical ¹	Yes	No	No	--	No	--
S1-R63-House	Yes	Yes	No	--	Yes	Yes
S1-R64-House	Not Impacted					
S1-R65-House	N/A	--	Yes	Yes	N/A	--

Representative Receiver	Reasonable Alternative 4		Reasonable Alternative 5		Reasonable Alternative 7	
	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)
S1-R66-House	N/A	--	Yes	Yes	Yes	Yes
S1-R67-House	N/A	--	Yes	Yes	Yes	Yes
S1-R68-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R69-Apartments	Yes	Yes	Yes	Yes	Yes	Yes
S1-R70-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R71-Medical ¹	N/A	--	No	--	Yes	No
S1-R72-Apartments	Yes	Yes	Yes	Yes	Yes	Yes
S1-R73-Apartments	N/A	--	Yes	Yes	N/A	--
S1-R74-Hotel	No	--	Yes	Yes	N/A	--
S1-R75-House	N/A	--	N/A	--	Yes	Yes
S1-R76-House	N/A	--	Yes	Yes	Yes	Yes
S1-R77-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R78-House	N/A	--	N/A	--	Yes	Yes
S1-R79-House	N/A	--	N/A	--	Yes	Yes
S1-R80-House	N/A	--	N/A	--	Yes	Yes
S1-R81-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R82-House	Yes	Yes	N/A	--	Yes	Yes
S1-R83-House	Yes	Yes	N/A	--	Yes	Yes
S1-R84-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R85-Restaurant	Yes	No	N/A	--	N/A	--
S1-R86-Restaurant	Yes	No	N/A	--	N/A	--
S1-R87-Apartments	No	--	Yes	Yes	No	--
S1-R88-Funeral Home ¹	Yes	No	N/A	--	N/A	--
S1-R89-Church ¹	No	--	N/A	--	No	--
S1-R90-House	Not Impacted					
S1-R91-Apartments	Yes	Yes	N/A	--	Yes	Yes
S1-R92-Apartments	Yes	Yes	N/A	--	Yes	Yes
S1-R93-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R94-House	Yes	Yes	N/A	--	N/A	--
S1-R95-House	Yes	Yes	N/A	--	N/A	--
S1-R96-House	Yes	Yes	N/A	--	N/A	--
S1-R97-House	Yes	Yes	N/A	--	N/A	--
S1-R98-House	Yes	Yes	Yes	Yes	Yes	Yes

Representative Receiver	Reasonable Alternative 4		Reasonable Alternative 5		Reasonable Alternative 7	
	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)
S1-R99-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R100-House	Yes	Yes	N/A	--	Yes	Yes
S1-R101-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R102-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R103-House	Yes	Yes	N/A	--	N/A	--
S1-R105-House	Yes	Yes	N/A	--	Yes	Yes
S1-R106-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R104-House	Yes	Yes	N/A	--	N/A	--
S1-R107-House	Yes	Yes	N/A	--	Yes	Yes
S1-R108-House	No	--	Yes	Yes	Yes	Yes
S1-R109-House	No	--	Yes	Yes	Yes	Yes
S1-R110-House	No	--	Yes	Yes	No	--
S1-R111-Apartments	No	--	Yes	Yes	No	--
S1-R112-House	N/A	--	Yes	Yes	Yes	Yes
S1-R113-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R114-House	Yes	Yes	No	--	No	--
S1-R115-House	Yes	Yes	No	--	No	--
S1-R116-House	Yes	Yes	No	--	No	--
S1-R117-House	Yes	Yes	No	--	No	--
S1-R118-House	Yes	Yes	No	--	No	--
S1-R119-House	Yes	Yes	No	--	Yes	Yes
S1-R120-Restaurant	N/A	--	Yes	No	N/A	--
S1-R121-House	Yes	Yes	No	--	No	--
S1-R122-House	Yes	Yes	No	--	No	--
S1-R123-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R124-House	Not Impacted					
S1-R125-House	Not Impacted					
S1-R126-Church ¹	No	--	No	--	No	--
S1-R127-Restaurant	N/A	--	Yes	No	Yes	No
S1-R128-Hotel Pool	N/A	--	No	No	Yes	No
S1-R129-Hotel Pool	N/A	--	No	--	No	--
S1-R130-Restaurant	No	--	N/A	--	Yes	No
S1-R131-Church ¹	No	--	N/A	--	Yes	No

Representative Receiver	Reasonable Alternative 4		Reasonable Alternative 5		Reasonable Alternative 7	
	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)
S1-R132-House	Not Impacted					
S1-R133-House	No	--	Yes	Yes	Yes	Yes
S1-R134-House	No	--	Yes	Yes	Yes	Yes
S1-R135-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R136-Church ¹	Not Impacted					
S1-R137-House	No	--	Yes	Yes	No	--
S1-R138-Church ¹	Yes	No	N/A	--	N/A	--
S1-R139-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R140-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R141-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R142-House	No	--	Yes	Yes	Yes	Yes
S1-R143-Restaurant	Yes	No	N/A	--	N/A	--
S1-R144-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R145-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R146-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R147-House	Yes	Yes	Yes	Yes	Yes	Yes
S1-R148-House	Yes	Yes	N/A	--	Yes	Yes
S1-R149-Restaurant	N/A	--	No	--	Yes	No
S1-R150-Restaurant	N/A	--	No	--	Yes	No
S1-R151-Restaurant	N/A	--	Yes	No	Yes	No
S1-R152-Apartments	Not Impacted					
S1-R153-Apartments	Not Impacted					
S1-R154-Condo Pool	Not Impacted					
S1-R155-Hotel Pool	Not Impacted					
S1-R156-Apartments	Not Impacted					
S1-R157-Restaurant	No	--	N/A	--	No	--
S1-R158-Apartments	No	--	Yes	Yes	No	--
S1-R159-Apartments	Not Impacted					
S1-R160-Apartments	Not Impacted					
S1-R161-Restaurant	Yes	No	N/A	--	N/A	--
S1-R162-School ¹	Yes	No	N/A	--	N/A	--
S1-R163-School Track and Field Outdoor Area	Yes	Yes	Yes	Yes	Yes	Yes

Representative Receiver	Reasonable Alternative 4		Reasonable Alternative 5		Reasonable Alternative 7	
	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)
S1-R164-Little White Oak Trail	Not Impacted					
S1-R165-Osborne Elem. School	Not Impacted					

Source: Study Team (May 2016).

Notes: N/A Represents receiver displacement.

1. A reduction factor of 20 dB(A) was applied to traffic noise levels to determine interior noise levels.

Table 11: Segment 2 Potential Noise Abatement Evaluation

Representative Receiver	Reasonable Alternative 10		Reasonable Alternative 11		Reasonable Alternative 12	
	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)
S2-R1-House	Yes	Yes	Yes	Yes	Yes	Yes
S2-R2-House	Yes	Yes	Yes	Yes	Yes	Yes
S2-R3-House	Yes	Yes	Yes	Yes	Yes	Yes
S2-R5-Motel Pool	Yes	No	Yes	No	Yes	No
S2-R6-House	Yes	Yes	Yes	Yes	Yes	Yes
S2-R7-House	Yes	Yes	Yes	Yes	Yes	Yes
S2-R8-House	Yes	No	Yes	No	Yes	No
S2-R9-House	Yes	No	Yes	No	Yes	No
S2-R10-House	Yes	No	Yes	No	Yes	No
S2-R11-Office	Yes	No	Yes	No	Yes	No
S2-R12-House	Yes	No	Yes	No	Yes	No
S2-R13-Prime Texas Properties Office	Yes	No	Yes	No	Yes	No
S2-R14-House	Yes	No	Yes	No	Yes	No
S2-R15-House	Yes	No	Yes	No	Yes	No
S2-R16-House	Yes	No	Yes	No	Yes	No
S2-R17-House	Yes	Yes	Yes	Yes	Yes	Yes
S2-R18-House	Yes	Yes	Yes	Yes	Yes	Yes
S2-R19-House	Yes	Yes	Yes	Yes	Yes	Yes
S2-R20-Woodland Park Ball Field	Yes	Yes	Yes	Yes	Yes	Yes
S2-R22-House	Yes	Yes	Yes	Yes	Yes	Yes
S2-R23-House ¹	Yes	Yes	Yes	Yes	Yes	Yes
S2-R24-Multi-Family Pool ¹	Yes	Yes	Yes	Yes	Yes	Yes
S2-R25 Adath Emeth Cemetery	Yes	No	Yes	No	Yes	No
S2-R26-Jack in the Box Restaurant	Yes	No	Yes	No	Yes	No
S2-R27-House	Yes	No	Yes	No	Yes	No
S2-R28-House	Yes	No	Yes	No	Yes	No
S2-R29-House	Yes	Yes	Yes	Yes	Yes	Yes
S2-R30-House	Yes	Yes	Yes	Yes	Yes	Yes
S2-R31-Roosevelt School Playground	Not Impacted					

Representative Receiver	Reasonable Alternative 10		Reasonable Alternative 11		Reasonable Alternative 12	
	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)
S2-R32-House	Yes	Yes	Yes	Yes	Yes	Yes
S2-R33-House	Yes	Yes	Yes	Yes	Yes	Yes
S2-R34-House	Yes	No	Yes	No	Yes	No
S2-R35-House	Yes	Yes	Yes	Yes	Yes	Yes
S2-R36-House	N/A	--	Yes	Yes	Yes	Yes
S2-R37-House	Yes	Yes	Yes	Yes	Yes	Yes
S2-R38-House	Yes	Yes	Yes	Yes	Yes	Yes
S2-R39-House	Yes	No	Yes	No	Yes	No
S2-R40-Jefferson Elem Playground	Yes	No	Yes	No	Yes	No
S2-R41-Jefferson Elem Playfield	Yes	No	Yes	No	Yes	No
S2-R42-House	Yes	No	Yes	No	Yes	No
S2-R43-House	Yes	Yes	Yes	Yes	Yes	Yes
S2-R44-House	Yes	Yes	Yes	Yes	Yes	Yes
S2-R45-Luxury Inn Motel	N/A	--	Yes	No	Yes	No
S2-R46-Multi-Family	Yes	Yes	Yes	Yes	Yes	Yes
S2-R47-Historic Hollywood Cemetery	Yes	Yes	Yes	Yes	Yes	Yes
S2-R48-House	Yes	Yes	Yes	Yes	Yes	Yes
S2-R49-House	Yes	Yes	Yes	Yes	Yes	Yes
S2-R50-House	N/A	--	Yes	Yes	Yes	Yes
S2-R51-House	Yes	Yes	Yes	Yes	Yes	Yes

Source: Study Team (May 2016).

Notes: N/A Represents receiver displacement.

1. Receiver modeled as part of the Segment 3 analysis because of proximity to the I-10/I-45 interchange which is included in Segment 3. The receivers are illustrated in the Segment 2 exhibits

Table 12: Segment 3 Potential Noise Abatement Evaluation

Representative Receiver	Reasonable Alternative 10		Reasonable Alternative 11		Reasonable Alternative 12	
	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)
S3-R001_House	Yes	Yes	Yes	Yes	Yes	Yes
S3- R003_House	Yes	Yes	Yes	Yes	Yes	Yes
S3- R004_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R005_Community Center	Yes	Yes	Yes	Yes	Yes	Yes
S3-R006_House	No	--	Yes	Yes	Yes	Yes
S3-R007_Medical	No	--	No	--	Yes	Yes
S3-R008_House	Yes	No	No	--	Yes	Yes
S3-R009_House	Yes	No	No	--	Yes	No
S3-R010_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R011_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R012_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R013_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R014_American Statesmanship Park	Yes	Yes	Yes	Yes	Yes	Yes
S3-R015_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R016_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R017_Church ¹	Not Impacted					
S3-R018_Aquarium	Yes	Yes	Yes	Yes	Yes	Yes
S3-R019_Park	Yes	Yes	Yes	Yes	Yes	Yes
S3-R020_Apartments	Yes	Yes	No	--	Yes	No
S3-R021_Buffalo Bayou	Yes	No	No	--	No	
S3-R022_Restaurant	Not Impacted					
S3-R023_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R024_Apartment	Yes	Yes	Yes	Yes	Yes	Yes
S3-R025_House	Not Impacted					
S3-R026_Restaurant	Yes	Yes	No	--	No	--
S3-R027_Park	Not Impacted					
S3-R028_Church ¹	Yes	Yes	No	--	No	--
S3-R029_Church ¹	Yes	Yes	No	--	Yes	Yes
S3-R030_House	Yes	No	Yes	No	Yes	No
S3-R031_Apartments	Yes	Yes	No	--	Yes	Yes

Representative Receiver	Reasonable Alternative 10		Reasonable Alternative 11		Reasonable Alternative 12	
	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)
S3-R032_Church ¹	Not Impacted					
S3-R033_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R034_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R035_Apartments	Yes	Yes	Yes	Yes	Yes	Yes
S3-R036_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R037_Park	Not Impacted					
S3-R038_School ¹	Not Impacted					
S3-R039_Playground	Yes	Yes	Yes	Yes	Yes	Yes
S3-R040_Apartment	Yes	Yes	Yes	Yes	Yes	Yes
S3-R041_Community Center ¹	Yes	Yes	No	--	Yes	Yes
S3-R042_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R043_House	Yes	No	Yes	No	Yes	No
S3-R044_House	Yes	No	Yes	No	Yes	No
S3-R045_Peggy's Point Plaza	Not Impacted					
S3-R046_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R047_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R048_House	Yes	No	Yes	No	Yes	No
S3-R049_Restaurant	Yes	Yes	Yes	Yes	Yes	Yes
S3-R050_Restaurant	Yes	No	Yes	No	Yes	No
S3-R051_Apartments	Yes	Yes	Yes	Yes	Yes	Yes
S3-R052_Apartments	Yes	Yes	Yes	Yes	Yes	Yes
S3-R053_House	Yes	No	Yes	No	Yes	No
S3-R054_School	Not Impacted					
S3-R055_House	Yes	No	Yes	No	Yes	No
S3-R056_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R057_House	Yes	No	Yes	No	Yes	No
S3-R058_Peggy Park	Yes	Yes	Yes	Yes	Yes	Yes
S3-R059_School	Not Impacted					
S3-R060_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R061_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R062_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R063_House	Yes	No	Yes	No	Yes	No

Representative Receiver	Reasonable Alternative 10		Reasonable Alternative 11		Reasonable Alternative 12	
	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)
S3-R064_House	Yes	No	Yes	No	Yes	No
S3-R065_House	No	--	Yes	Yes	No	--
S3-R066_House	No	--	Yes	Yes	No	--
S3-R067_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R068_Church ¹	Yes	No	No	--	Yes	No
S3-R069_Apartments	Yes	Yes	Yes	Yes	Yes	Yes
S3-R070_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R071_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R072_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R073_House	Not Impacted					
S3-R074_Apartment	Yes	Yes	Yes	Yes	Yes	Yes
S3-R075_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R076_House	No	--	N/A	--	Yes	Yes
S3-R077_House	No	--	Yes	No	Yes	No
S3-R078_House	No	--	No	--	Yes	Yes
S3-R079_Apartment	Yes	Yes	Yes	Yes	Yes	Yes
S3-R080_House	Yes	No	Yes	No	Yes	No
S3-R081_House	No	--	Yes	Yes	No	--
S3-R082_House	Not Impacted					
S3-R083_Apartments	N/A	--	No	--	N/A	--
S3-R084_Apartment	No	--	No	--	Yes	Yes
S3-R085_Apartment	Yes	Yes	No	--	Yes	Yes
S3-R086_Restaurant	No	--	N/A	--	N/A	--
S3-R087_Restaurant	Yes	No	N/A	--	N/A	--
S3-R088_Apartments	Yes	Yes	No		Yes	Yes
S3-R089_Apartments	Not Impacted					
S3-R090_Apartment	Yes	Yes	N/A	--	N/A	--
S3-R091_James Bute Park	Not Impacted					
S3-R092_House	Yes	No	No		Yes	No
S3-R093_Apartment	Yes	No	No		Yes	No
S3-R094_University	Yes	No	No		Yes	No
S3-R095_House	Yes	No	Yes	No	Yes	No

Representative Receiver	Reasonable Alternative 10		Reasonable Alternative 11		Reasonable Alternative 12	
	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)
S3-R096_Church ¹	Not Impacted					
S3-R097_Apartments	Yes	No	Yes	No	Yes	No
S3-R098_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R099_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R100_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R101_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R102_Church ¹	Not Impacted					
S3-R103_Church ¹	Yes	Yes	Yes	Yes	Yes	Yes
S3-R104_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R105_School	Yes	Yes	Yes	Yes	Yes	Yes
S3-R106_Senior Center ¹	Not Impacted					
S3-R107_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R108_House	Yes	No	Yes	No	Yes	No
S3-R109_Park	Yes	Yes	Yes	Yes	Yes	Yes
S3-R110_Apartments	Yes	Yes	Yes	Yes	Yes	Yes
S3-R111_Apartments	Yes	Yes	Yes	Yes	Yes	Yes
S3-R112_House	Yes	Yes	Yes	Yes	Yes	Yes
S3-R113_Church ¹	Not Impacted					
S3-R114_Freed Art and Nature Park	Yes	No	Yes	No	Yes	No
S3-R115_Hogg Park	Yes	No	Yes	No	Yes	No
S3-R117_Linear Park	Yes	Yes	Yes	Yes	Yes	Yes
S3-R118_Sam Houston Park	No	--	No	--	Yes	Yes
S3-R119_Tranquility Park	Not Impacted					
S3-R120_Emancipation Park	Not Impacted					
S3-R121_Discovery Green	Not Impacted					
S3-R122_Guadalupe Plaza	Not Impacted					
S3-R123_Buffalo Bayou Trail	Not Impacted					
S3-R124_Swiney Park	Not Impacted					
S3-R125_Hennessy Park	Yes	Yes	Yes	Yes	Yes	Yes
S3-R126_Allen's Landing Memorial Park	Not Impacted					

Representative Receiver	Reasonable Alternative 10		Reasonable Alternative 11		Reasonable Alternative 12	
	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)	Noise Impact (Yes/No)	Potential Feasible & Reasonable Traffic Noise Barriers (Yes/No)
S3-R127_ Confederate Ship Area	Not Impacted					
S3-R128_ Goyen Park	Yes	Yes	No		Yes	Yes
S3-R129_ Woodland Park	Not Impacted					
S3-R130_ Brewster Park	Yes	Yes	Yes	Yes	Yes	Yes
S3-R131_ NAC_B_Midway Development Apartments	Not Impacted					
S3-R132_ NAC_B_Hardy Yards Apartments	Not Impacted					
S3-R133_ NAC_C_Park	Not Impacted					
S3-R134_ NAC_C_Park	Yes	Yes	Yes	Yes	Yes	Yes
S3-R135_ NAC_B_Apartments (Cheek Neal)	Yes	No	Yes	No	Yes	No

Source: Study Team (May 2016).

Notes: N/A Represents receiver displacement.

1. A reduction factor of 20 dB(A) was applied to traffic noise levels to determine interior noise levels.

6.0 CONSTRUCTION IMPACTS

During the construction phase of this project, temporary increases in noise may result from construction activities. Noise associated with the construction of the project is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns. However, construction normally occurs during daylight hours when occasional loud noises are more tolerable. None of the receivers are expected to be exposed to construction noise for a long duration; therefore, any extended disruption of normal activities is not expected. Provisions would be included in the construction plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls and proper maintenance of muffler systems.

7.0 CONCLUSION

Land use activity within the three segments includes parcels that are currently undeveloped land. To avoid noise impacts that may results from future development of properties adjacent to the project, local officials responsible for land use control programs should ensure, to the maximum extent possible, no new activities are planned or constructed along or within the following predicted (2035) noise impact contour. **Table 13** through **Table 15** presents the predicted noise impact contour for undeveloped parcels by segment and alternative.

Table 13: Segment 1 Traffic Noise Contours [dB(A) Leq]

Location	Land Use	Impact Contour	Distance from ROW (ft)		
			Reasonable Alternative 4	Reasonable Alternative 5	Reasonable Alternative 7
Beltway 8 at I-45 (I-45 northbound)	NAC Categories B&C	66 dB(A)	350	200	250
	NAC Category E	71 dB(A)	100	25	50
Aldine Bender and Esplanade Blvd. (I-45 northbound)	NAC Categories B&C	66 dB(A)	450	400	550
	NAC Category E	71 dB(A)	75	50	100
North of Midland (I-45 northbound)	NAC Categories B&C	66 dB(A)	350	350	300
	NAC Category E	71 dB(A)	125	125	100
Halls Bayou, north of SH 249 (I-45 northbound)	NAC Categories B&C	66 dB(A)	400	350	400
	NAC Category E	71 dB(A)	150	75	100
North of W. Canino Rd. (I-45 northbound)	NAC Categories B&C	66 dB(A)	300	300	275
	NAC Category E	71 dB(A)	100	75	50
South of W. Canino Rd. (I-45 northbound)	NAC Categories B&C	66 dB(A)	300	250	250
	NAC Category E	71 dB(A)	75	25	25
500 ft. South of W. Canino Rd. (I-45 northbound)	NAC Categories B&C	66 dB(A)	300	250	250
	NAC Category E	71 dB(A)	25	25	25
South of Parker (I-45 northbound)	NAC Categories B&C	66 dB(A)	400	350	350
	NAC Category E	71 dB(A)	At ROW	100	100
South of Burrese St. (I-45 northbound)	NAC Categories B&C	66 dB(A)	350	350	350
	NAC Category E	71 dB(A)	100	150	75
Airline at I-45 (I-45 southbound)	NAC Categories B&C	66 dB(A)	400	400	400
	NAC Category E	71 dB(A)	100	150	50
I-45 between Marable Dr. and Victoria Dr. (I-45 southbound)	NAC Categories B&C	66 dB(A)	350	350	350
	NAC Category E	71 dB(A)	150	100	50
North of Rogers (I-45 southbound)	NAC Categories B&C	66 dB(A)	400	350	400
	NAC Category E	71 dB(A)	100	50	50
North of Rittenhouse (I-45 southbound)	NAC Categories B&C	66 dB(A)	350	300	350
	NAC Category E	71 dB(A)	125	100	100
1000 ft. North of DeWalt (I-45 southbound)	NAC Categories B&C	66 dB(A)	450	300	350
	NAC Category E	71 dB(A)	175	100	150
South of SH 249	NAC Categories B&C	66 dB(A)	400	350	400

Location	Land Use	Impact Contour	Distance from ROW (ft)		
			Reasonable Alternative 4	Reasonable Alternative 5	Reasonable Alternative 7
(I-45 southbound)	NAC Category E	71 dB(A)	100	75	100
South of Turney (I-45 southbound)	NAC Categories B&C	66 dB(A)	350	300	350
	NAC Category E	71 dB(A)	100	Within ROW	50
North of Turney (I-45 southbound)	NAC Categories B&C	66 dB(A)	300	350	400
	NAC Category E	71 dB(A)	100	100	150
South of Northville (I-45 southbound)	NAC Categories B&C	66 dB(A)	350	300	300
	NAC Category E	71 dB(A)	100	75	75
North of Winding Bayou (I-45 southbound)	NAC Categories B&C	66 dB(A)	300	NA	NA
	NAC Category E	71 dB(A)	100	NA	NA
South of Gellispe (I-45 southbound)	NAC Categories B&C	66 dB(A)	300	350	350
	NAC Category E	71 dB(A)	75	100	125
North of Gellispe (I-45 southbound)	NAC Categories B&C	66 dB(A)	300	400	400
	NAC Category E	71 dB(A)	75	150	150
South of Fallbrook (I-45 southbound)	NAC Categories B&C	66 dB(A)	300	300	450
	NAC Category E	71 dB(A)	25	25	100
600 ft. North of Plaza Verde (I-45 southbound)	NAC Categories B&C	66 dB(A)	300	200	300
	NAC Category E	71 dB(A)	50	25	100
Beltway 8 at I-45 (I-45 southbound)	NAC Categories B&C	66 dB(A)	400	150	325
	NAC Category E	71 dB(A)	50	Within ROW	50

Source: Study Team (June 2016).

Table 14: Segment 2 Traffic Noise Contours [dB(A) Leq]

Location	Land Use	Impact Contour	Distance from ROW (ft)		
			Reasonable Alternative 10	Reasonable Alternative 11	Reasonable Alternative 12
Quitman to Thomas (I-45 northbound)	NAC Categories B&C	66 dB(A)	200	200	250
	NAC Category E	71 dB(A)	25	Within ROW	50
Embry to Glenpark (I-45 northbound)	NAC Categories B&C	66 dB(A)	300	350	350
	NAC Category E	71 dB(A)	75	125	150
Parkview to North (I-45 southbound)	NAC Categories B&C	66 dB(A)	300	350	350
	NAC Category E	71 dB(A)	75	150	150
Glenpark to Farwood (I-45 northbound)	NAC Categories B&C	66 dB(A)	Within ROW	250	300
	NAC Category E	71 dB(A)	Within ROW	25	100
N Main to Cottage (I-45 southbound)	NAC Categories B&C	66 dB(A)	450	250	375
	NAC Category E	71 dB(A)	200	50	200
Cottage to Florence Ave (I-45 northbound)	NAC Categories B&C	66 dB(A)	150	250	200
	NAC Category E	71 dB(A)	25	50	At ROW
Fugate to Patton (I-45 southbound)	NAC Categories B&C	66 dB(A)	400	400	400
	NAC Category E	71 dB(A)	100	100	100
Florence to Patton (I-45 northbound)	NAC Categories B&C	66 dB(A)	400	450	400
	NAC Category E	71 dB(A)	75	100	75
Patton to Coronado Ave (I-45 southbound)	NAC Categories B&C	66 dB(A)	350	400	400
	NAC Category E	71 dB(A)	100	Within ROW	50
Coronado Ave to Cavalcade (I-45 southbound)	NAC Categories B&C	66 dB(A)	200	300	250
	NAC Category E	71 dB(A)	Within ROW	Within ROW	Within ROW
Frawley to Red Oak (I-45 northbound)	NAC Categories B&C	66 dB(A)	400	450	450
	NAC Category E	71 dB(A)	Within ROW	100	100
Cavalcade to Link Rd (I-45 northbound)	NAC Categories B&C	66 dB(A)	150	250	300
	NAC Category E	71 dB(A)	Within ROW	150	150
Cavalcade to Link Rd (I-45 southbound)	NAC Categories B&C	66 dB(A)	100	200	250
	NAC Category E	71 dB(A)	Within ROW	Within ROW	Within ROW
Robert E Lee to Eichwurzel Rd (I-45 northbound)	NAC Categories B&C	66 dB(A)	400	400	400
	NAC Category E	71 dB(A)	At ROW	At ROW	100
Robert E Lee to	NAC Categories B&C	66 dB(A)	275	350	350

Location	Land Use	Impact Contour	Distance from ROW (ft)		
			Reasonable Alternative 10	Reasonable Alternative 11	Reasonable Alternative 12
Sylvester Rd (I-45 southbound)	NAC Category E	71 dB(A)	At ROW	50	100
Eichwurzel Rd to Sylvester Rd (I-45 northbound)	NAC Categories B&C	66 dB(A)	350	400	450
	NAC Category E	71 dB(A)	At ROW	Within ROW	100
Melbourne to Stokes (I-45 northbound)	NAC Categories B&C	66 dB(A)	450	400	400
	NAC Category E	71 dB(A)	50	Within ROW	50
E 33 rd to Stokes (I-45 southbound)	NAC Categories B&C	66 dB(A)	300	225	225
	NAC Category E	71 dB(A)	Within ROW	Within ROW	Within ROW
Hinton to Airline Dr (I-45 southbound, north of I-610)	NAC Categories B&C	66 dB(A)	350	300	300
	NAC Category E	71 dB(A)	50	50	50
Airline to E 32 nd St (I-45 southbound, north of I-610)	NAC Categories B&C	66 dB(A)	500	350	400
	NAC Category E	71 dB(A)	100	100	75
Airline to E 28 th St (I-45 southbound, south of I-610)	NAC Categories B&C	66 dB(A)	350	350	300
	NAC Category E	71 dB(A)	50	100	50
Kirkwood to Fulton (I-45 northbound, north of I-610)	NAC Categories B&C	66 dB(A)	450	350	350
	NAC Category E	71 dB(A)	At ROW	50	At ROW
Fulton to Helmers (I-45 northbound, north of I-610)	NAC Categories B&C	66 dB(A)	400	400	400
	NAC Category E	71 dB(A)	50	100	100

Source: Study Team (June 2016).

Table 15: Segment 3 Traffic Noise Contours [dB(A) Leq]

Location	Land Use	Impact Contour	Distance from ROW (ft)		
			Reasonable Alternative 10	Reasonable Alternative 11	Reasonable Alternative 12
I-10 at I-69 (I-10 eastbound)	NAC Categories B&C	66 dB(A)	350	500	400
	NAC Category E	71 dB(A)	25	50	50
I-10 east of I-69 (I-10 eastbound)	NAC Categories B&C	66 dB(A)	250	200	250
	NAC Category E	71 dB(A)	25	At ROW	25
I-69 north of I-45 (I-69 southbound)	NAC Categories B&C	66 dB(A)	250	150	300
	NAC Category E	71 dB(A)	25	At ROW	75
I-69 at I-45 (I-69 southbound)	NAC Categories B&C	66 dB(A)	150	100	200
	NAC Category E	71 dB(A)	At ROW	Within ROW	17
I-45 at I-69 (I-45 southbound)	NAC Categories B&C	66 dB(A)	300	250	350
	NAC Category E	71 dB(A)	Within ROW	Within ROW	50
I-45 south of I-69 (I-45 southbound)	NAC Categories B&C	66 dB(A)	150	200	200
	NAC Category E	71 dB(A)	Within ROW	Within ROW	At ROW

Source: Study Team (June 2016).

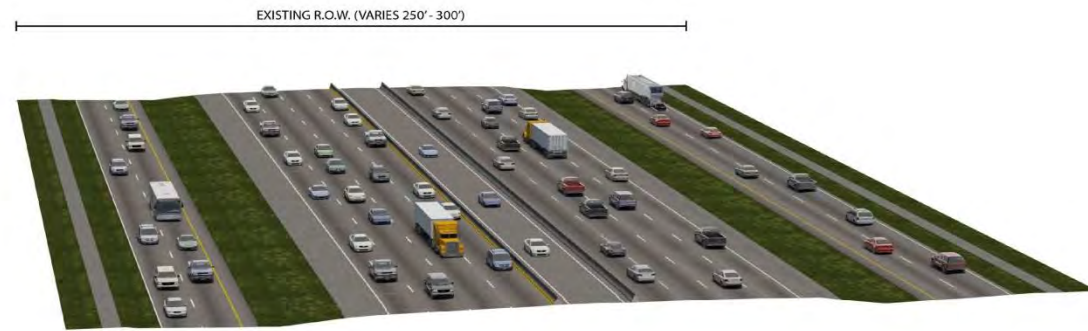
A copy of this traffic noise analysis will be made available to local officials. On the date of approval of the NHHIP Final EIS, FHWA and TxDOT are no longer responsible for providing noise abatement for new development adjacent to the project.

Appendix A: Existing and Proposed Typical Sections

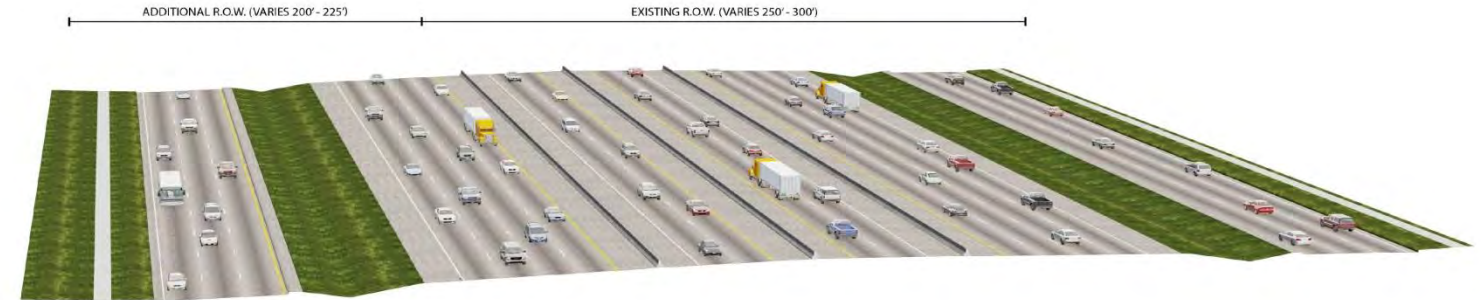


I-45 NORTH - SEGMENT 1 (FROM BELTWAY 8 TO I-610)

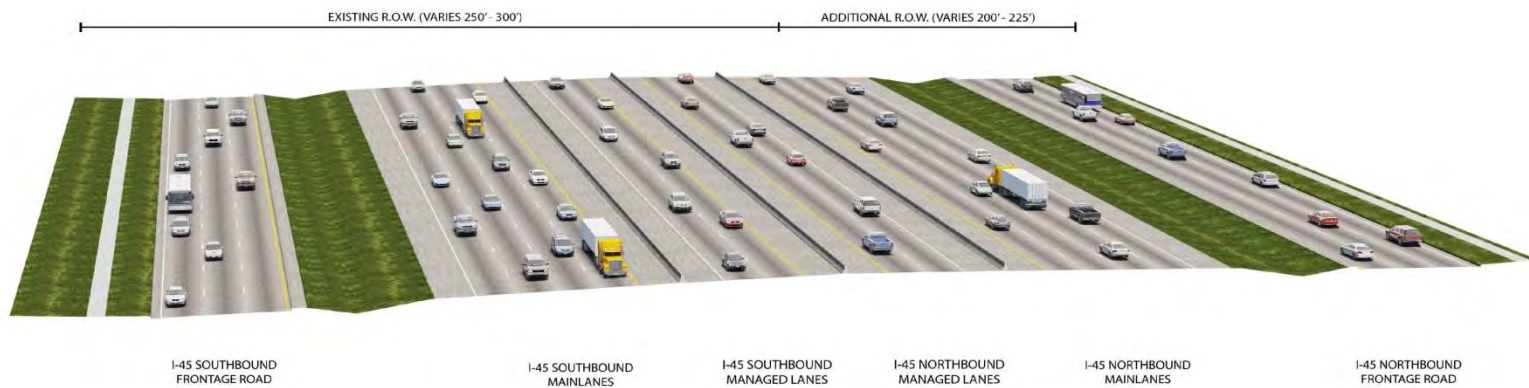
PRELIMINARY SUBJECT TO CHANGE



SEGMENT 1 – EXISTING



SEGMENT 1 – ALTERNATIVE 4



SEGMENT 1 – ALTERNATIVE 5



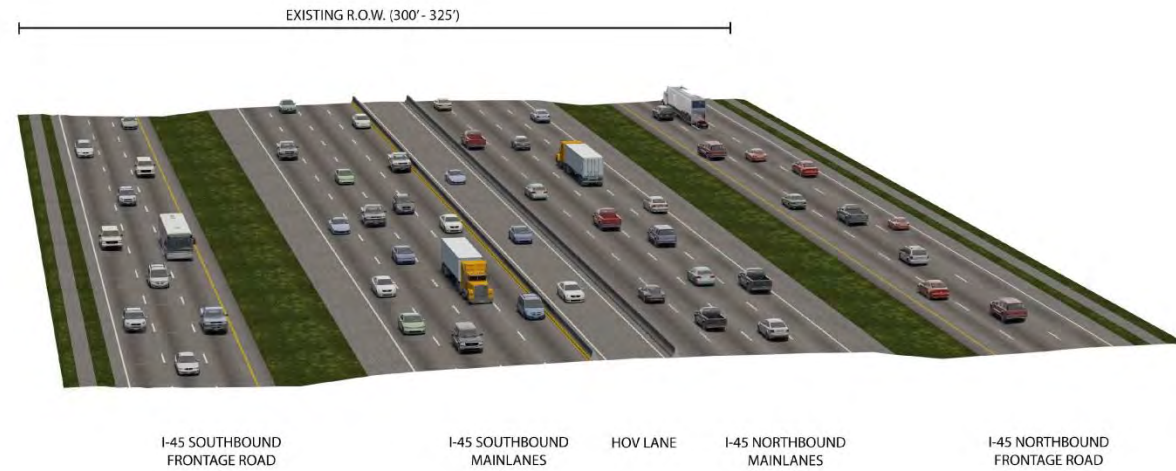
SEGMENT 1 – ALTERNATIVE 7

EXHIBIT 2
TYPICAL SECTIONS
SHEET 1 OF 9

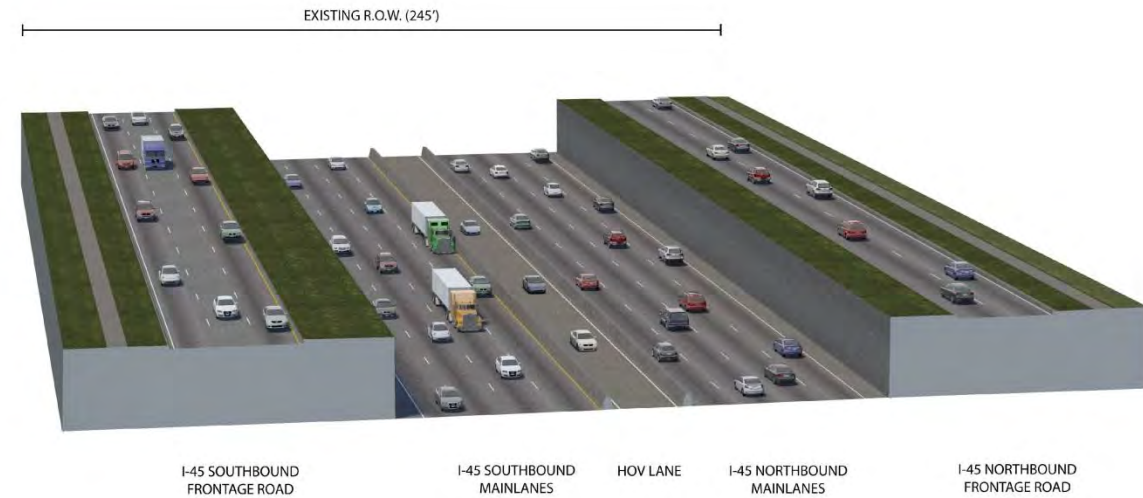
NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT
DEIS TRAFFIC NOISE TECHNICAL REPORT
HARRIS COUNTY, TX



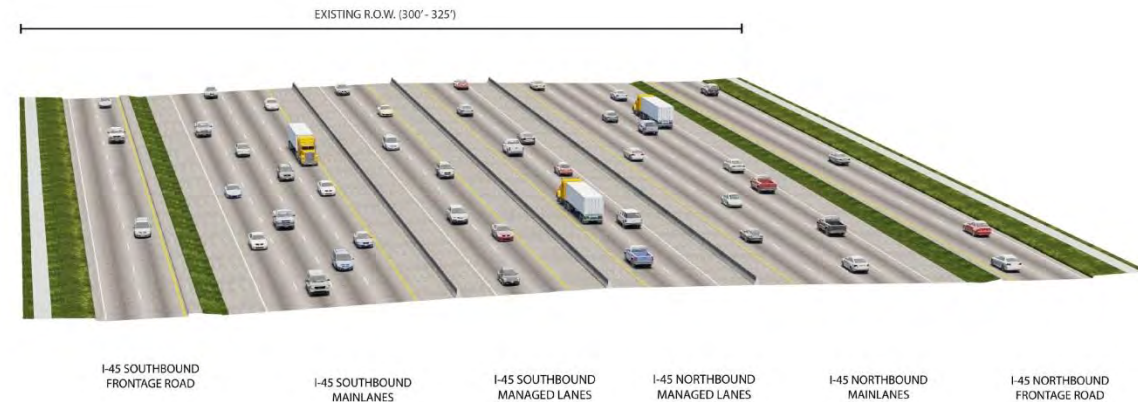
I-45 NORTH - SEGMENT 2 (I-610 TO I-10)
PRELIMINARY SUBJECT TO CHANGE



SEGMENT 2 – EXISTING (AT-GRADE)



SEGMENT 2 – EXISTING (DEPRESSED)



SEGMENT 2 – ALTERNATIVE 10 (AT-GRADE)



SEGMENT 2 – ALTERNATIVE 10 (DEPRESSED)

EXHIBIT 2
TYPICAL SECTIONS
SHEET 2 OF 9

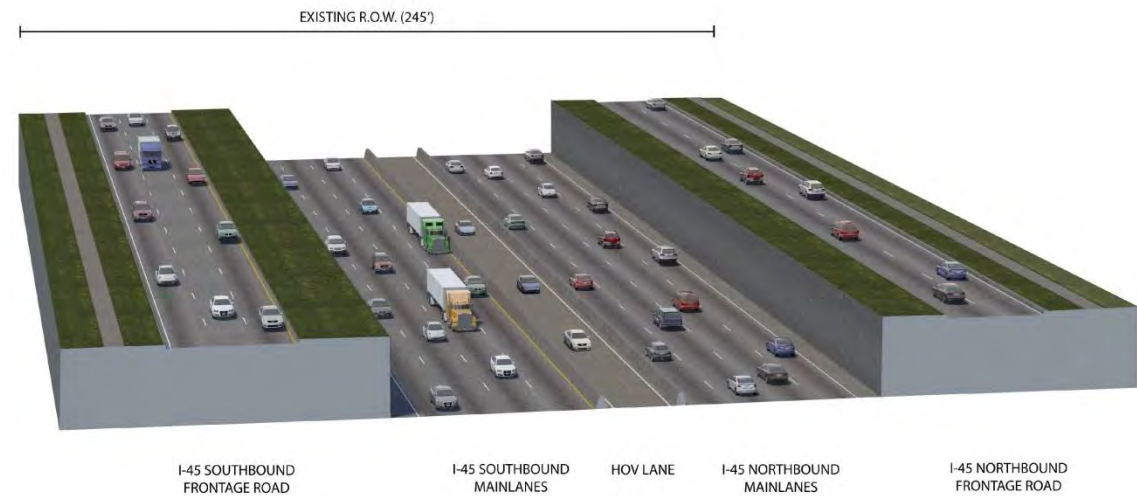
NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT
DEIS TRAFFIC NOISE TECHNICAL REPORT
HARRIS COUNTY, TX



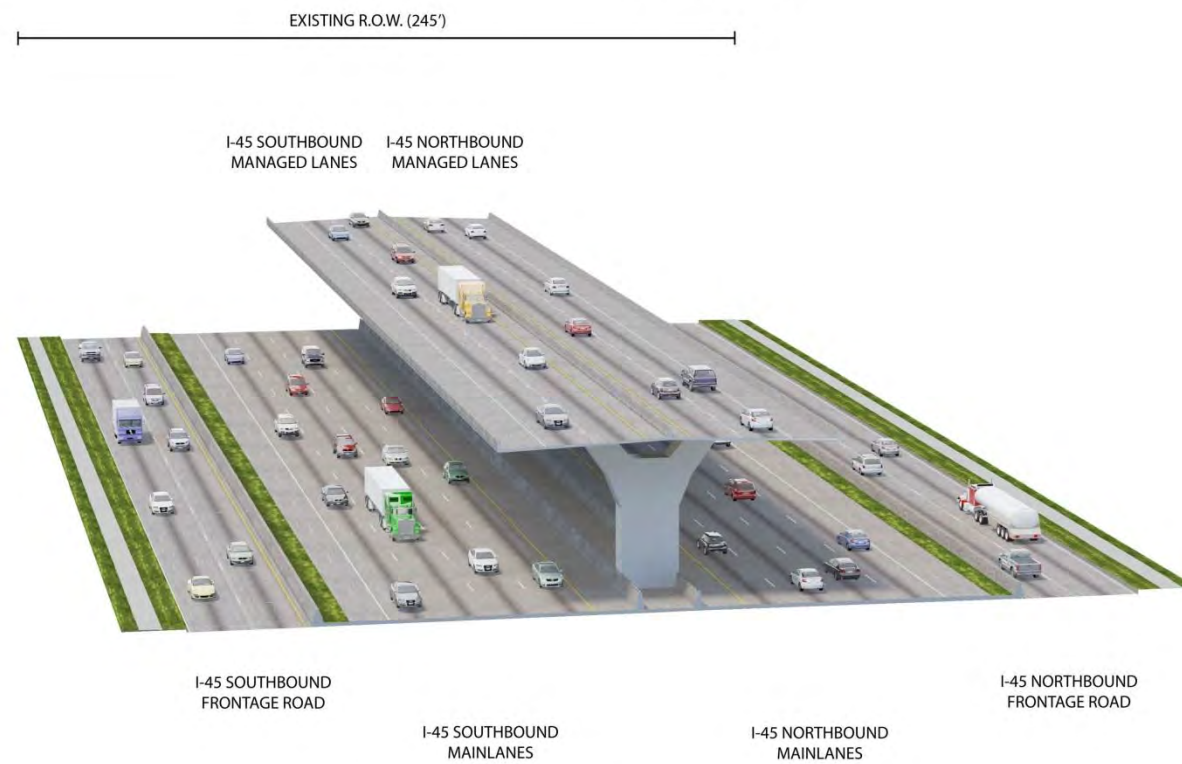
I-45 NORTH - SEGMENT 2 (I-610 TO I-10)
PRELIMINARY SUBJECT TO CHANGE



SEGMENT 2 – EXISTING (AT-GRADE)



SEGMENT 2 – EXISTING (DEPRESSED)



SEGMENT 2 – ALTERNATIVE 11 (AT-GRADE)

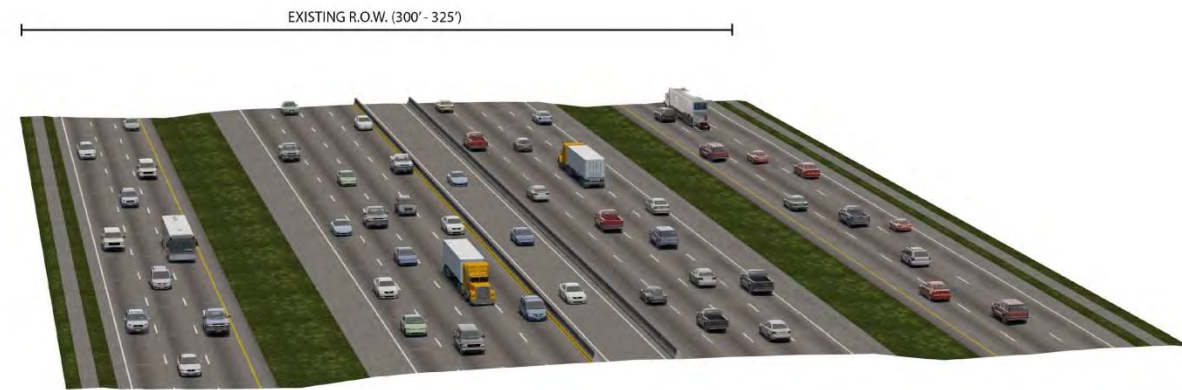


SEGMENT 2 – ALTERNATIVE 11 (DEPRESSED)



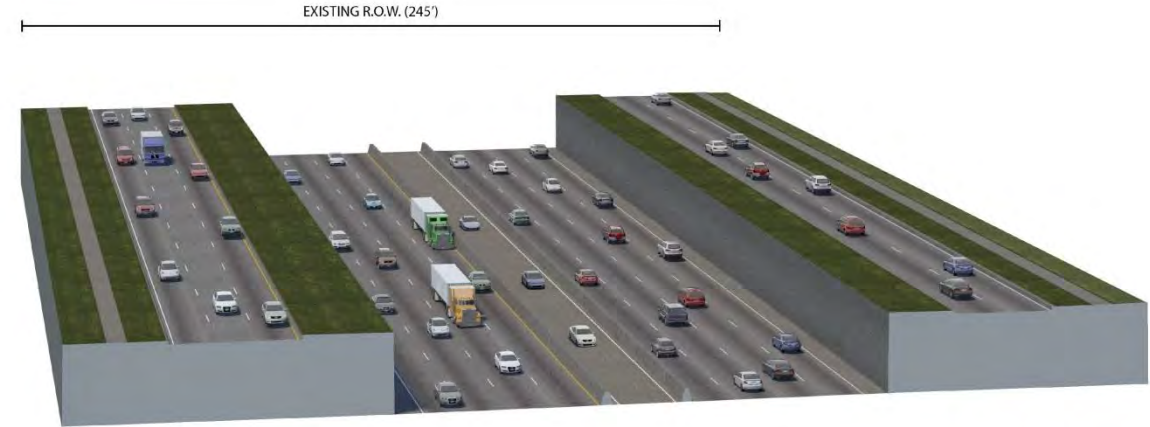
I-45 NORTH - SEGMENT 2 (I-610 TO I-10)

PRELIMINARY SUBJECT TO CHANGE



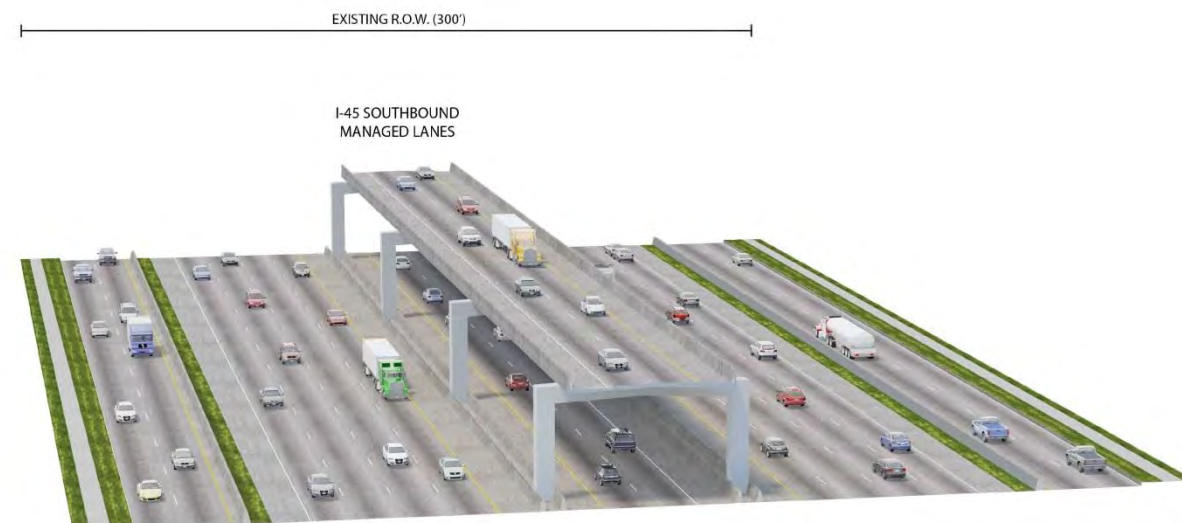
I-45 SOUTHBOUND FRONTAGE ROAD I-45 SOUTHBOUND MAINLANES HOV LANE I-45 NORTHBOUND MAINLANES I-45 NORTHBOUND FRONTAGE ROAD

SEGMENT 2 – EXISTING (AT-GRADE)



I-45 SOUTHBOUND FRONTAGE ROAD I-45 SOUTHBOUND MAINLANES HOV LANE I-45 NORTHBOUND MAINLANES I-45 NORTHBOUND FRONTAGE ROAD

SEGMENT 2 – EXISTING (DEPRESSED)



I-45 SOUTHBOUND FRONTAGE ROAD I-45 SOUTHBOUND MAINLANES I-45 NORTHBOUND MANAGED LANES I-45 NORTHBOUND MAINLANES I-45 NORTHBOUND FRONTAGE ROAD

SEGMENT 2 – ALTERNATIVE 12 (AT-GRADE)



I-45 SOUTHBOUND MAINLANES I-45 NORTHBOUND MANAGED LANES I-45 NORTHBOUND MAINLANES

SEGMENT 2 – ALTERNATIVE 12 (DEPRESSED)

**EXHIBIT 2
TYPICAL SECTIONS
SHEET 4 OF 9**

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT
DEIS TRAFFIC NOISE TECHNICAL REPORT
HARRIS COUNTY, TX



I-45 NORTH - SEGMENT 3 (ALT 10)

PRELIMINARY SUBJECT TO CHANGE



SEGMENT 3 – EXISTING (I-10)



SEGMENT 3 – EXISTING (I-45)



SEGMENT 3 – ALTERNATIVE 10 (I-10)



SEGMENT 3 – ALTERNATIVE 10 (I-45)

EXHIBIT 2
TYPICAL SECTIONS
SHEET 5 OF 9

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT
DEIS TRAFFIC NOISE TECHNICAL REPORT
HARRIS COUNTY, TX



I-45 NORTH - SEGMENT 3 (ALT 11)

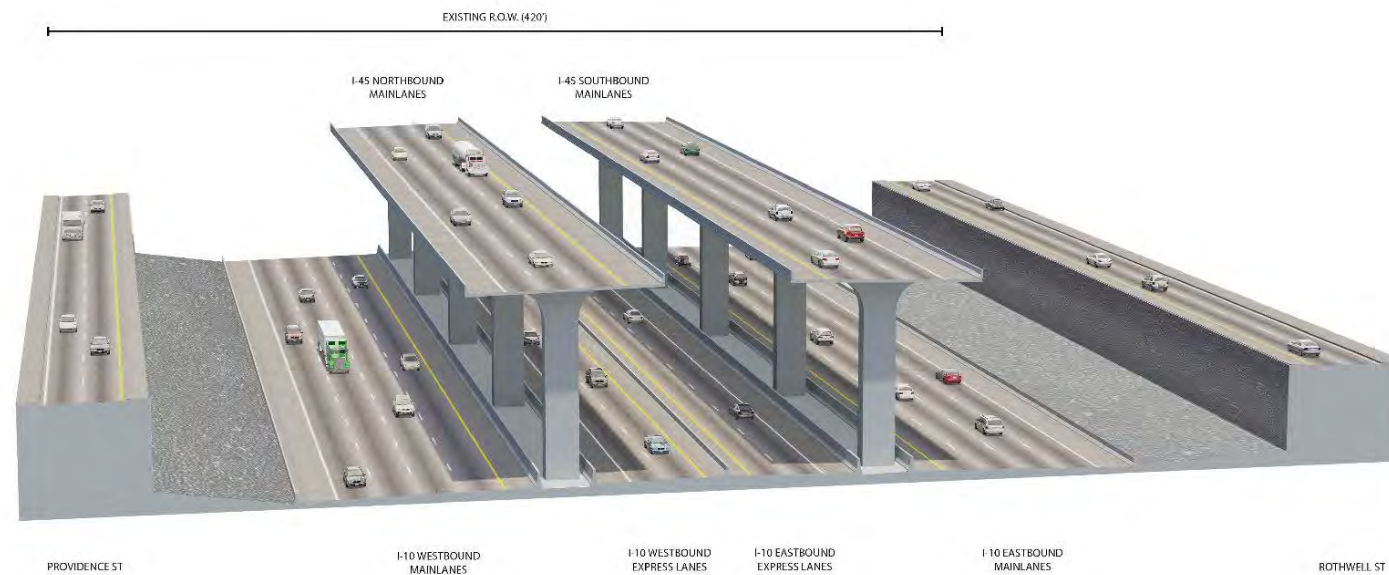
PRELIMINARY SUBJECT TO CHANGE



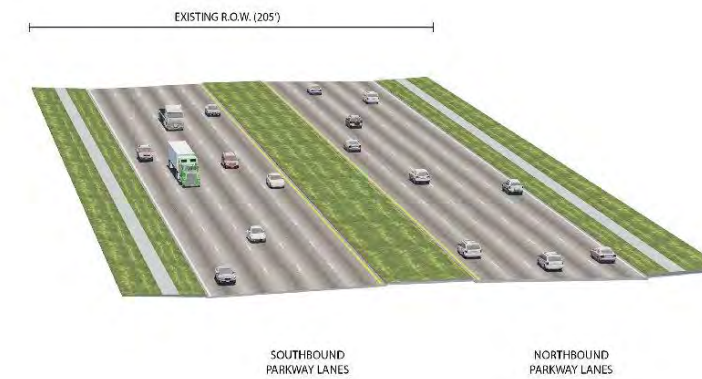
SEGMENT 3 – EXISTING (I-10)



SEGMENT 3 – EXISTING (I-45)



SEGMENT 3 – ALTERNATIVE 11 (I-10)



SEGMENT 3 – ALTERNATIVE 11 (I-45/PARKWAY)

EXHIBIT 2
TYPICAL SECTIONS
SHEET 6 OF 9

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT
DEIS TRAFFIC NOISE TECHNICAL REPORT
HARRIS COUNTY, TX



I-45 NORTH - SEGMENT 3 (ALT 11)

PRELIMINARY SUBJECT TO CHANGE



SEGMENT 3 – EXISTING (US 59)



SEGMENT 3 – ALTERNATIVE 11 (US 59)

EXHIBIT 2
TYPICAL SECTIONS
SHEET 7 OF 9

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT
DEIS TRAFFIC NOISE TECHNICAL REPORT
HARRIS COUNTY, TX



I-45 NORTH - SEGMENT 3 (ALT 12)

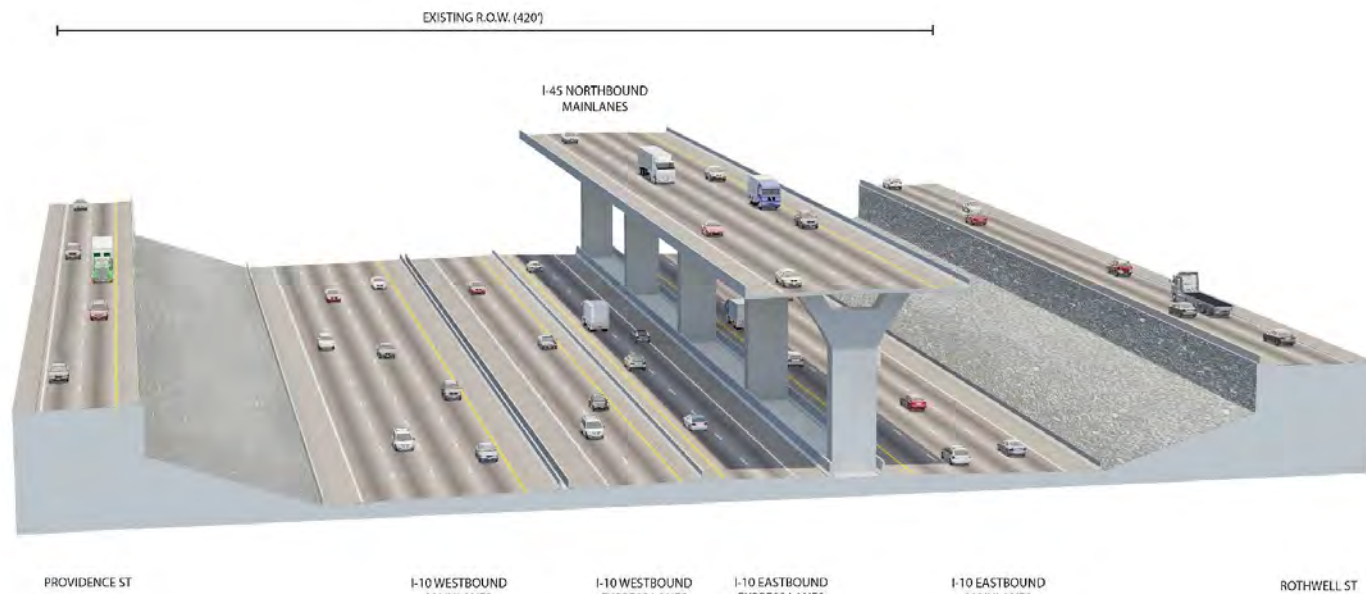
PRELIMINARY SUBJECT TO CHANGE



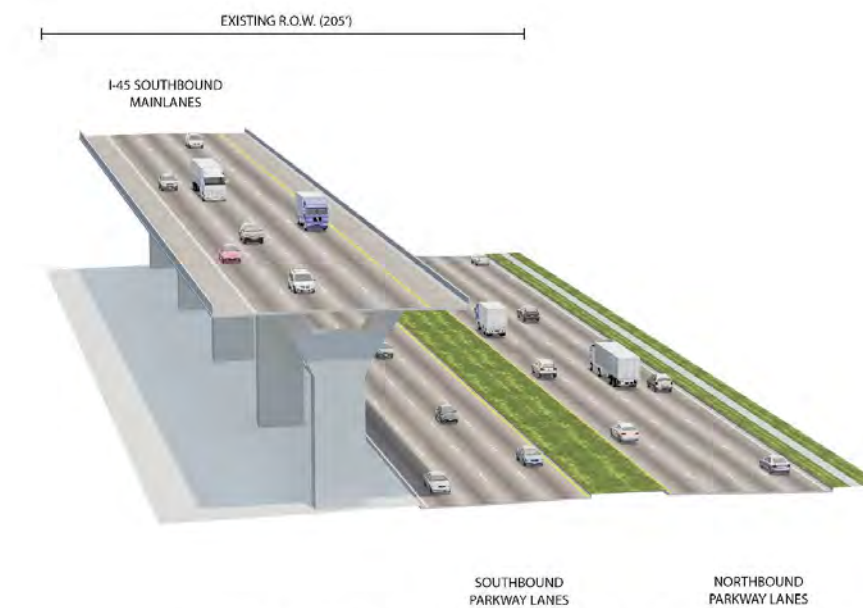
SEGMENT 3 – EXISTING (I-10)



SEGMENT 3 – EXISTING (I-45)



SEGMENT 3 – ALTERNATIVE 12 (I-10)



SEGMENT 3 – ALTERNATIVE 12 (I-45/PARKWAY)

EXHIBIT 2
TYPICAL SECTIONS
SHEET 8 OF 9

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT
DEIS TRAFFIC NOISE TECHNICAL REPORT
HARRIS COUNTY, TX

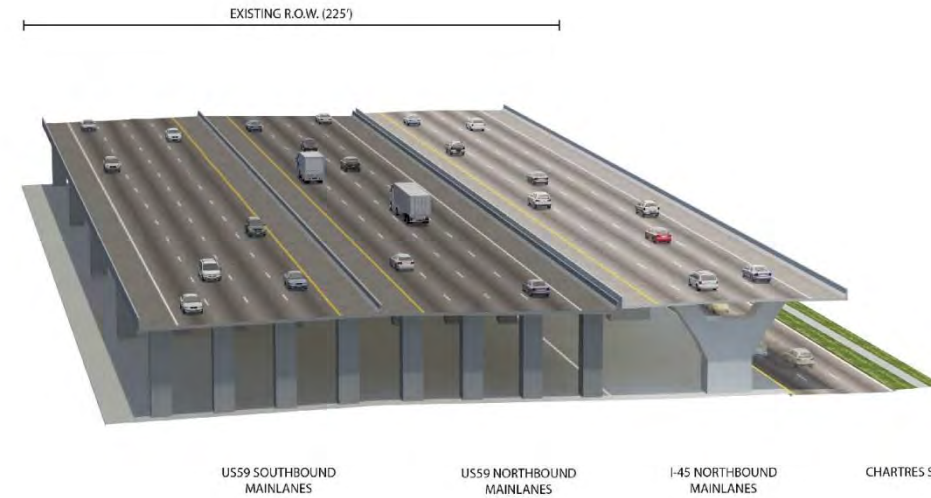


I-45 NORTH - SEGMENT 3 (ALT 12)

PRELIMINARY SUBJECT TO CHANGE



SEGMENT 3 – EXISTING (US 59)



SEGMENT 3 – ALTERNATIVE 12 (US 59)

**EXHIBIT 2
TYPICAL SECTIONS
SHEET 9 OF 9**

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT
DEIS TRAFFIC NOISE TECHNICAL REPORT
HARRIS COUNTY, TX

Appendix B: TP&P Traffic Approval

Stephanie Guillot

From: Darrin Willer
Sent: Thursday, May 05, 2016 3:40 PM
To: Stephanie Guillot
Cc: Joel Salinas; 58557_I-45_Phase1
Subject: FW: NHHIP - Traffic Volumes and Growth Rates
Attachments: NHHIP DEIS Traffic Methodology Summary.docx

FYI as requested.

From: Janie Temple [<mailto:Janie.Temple@txdot.gov>]
Sent: Tuesday, October 27, 2015 1:14 PM
To: Wahida Wakil
Cc: Darrin Willer; Wahida Wakil; Joel Salinas; Stephanie Guillot; Amar, Elizabeth Runey; Loney, Ashish G
Subject: NHHIP - Traffic Volumes and Growth Rates

Wahida,

I have reviewed the NHHIP DEIS methodology summary and the traffic volumes and growth rates and concur with the methodology. In addition, the resulting traffic volumes and growth rates are consistent with the methodology.

We look forward to working with your team on the other analyses being planned for this effort.

Janie

Talk. Text. Crash.



Appendix C: Traffic Volume Worksheets

TRAFFIC DATA FOR NOISE MODELING (YEAR 2015)
NHHIP - SEGMENT 1

QA/QC:
Source of traffic: CDM Smith, H-GAC modified regional travel demand model, received 1/29/15
Source of traffic factors: CDM Smith, raw traffic data for Segment 1 (IH45 south of Gulf Bank Road), received 2/6/15
Existing conditions - speed is posted; Predicted - Speed is design speed (rec'd from Joel S. on 3-6-15)
Assumptions:
1. traffic factors same for all segments
2. averaged daily traffic for smaller sections within each segment

MAINLANES
FRONTAGE ROADS
MANAGED LANES

	Information needed
	Calculated fields

ML & FR	
Growth Rate =	1%
Kfactor =	0.06
%Cars=	0.94
%Medium Trucks=	0.02
%Heavy Trucks=	0.04

AREA 1: BW 8 to Aldine Bender			
TNM Roadway NBML-1		Enter in TNM	
2014 ADT=	124,061	# Lanes	Speed
2015 ADT=	124,719		
Kfactor =	0.060		
DHV=	7483	4	
Cars	7034	1759	60
Medium Trucks	150	37	60
Heavy trucks	299	75	60

AREA 1: BW 8 to Aldine Bender			
TNM Roadway NBFR-1		Enter in TNM	
2014 ADT=	21,609	# Lanes	Speed
2015 ADT=	21,724		
Kfactor =	0.060		
DHV=	1303	2	
Cars	1225	613	40
Medium Trucks	26	13	40
Heavy trucks	52	26	40

AREA 1: BW 8 to Aldine Bender			
TNM Roadway HOV-1		Enter in TNM	
2014 ADT=	13,490	# Lanes	Speed
2015 ADT=	13,561		
Kfactor =	0.060		
DHV=	814	1	
Cars	765	765	60
Medium Trucks	16	16	60
Heavy trucks	33	33	60

AREA 1: BW 8 to Aldine Bender			
TNM Roadway SBML-1		Enter in TNM	
2014 ADT=	114,582	# Lanes	Speed
2015 ADT=	115,189		
Kfactor =	0.060		
DHV=	6911	4	
Cars	6497	1624	60
Medium Trucks	138	35	60
Heavy trucks	276	69	60

AREA 1: BW 8 to Aldine Bender			
TNM Roadway SBFR-1		Enter in TNM	
2014 ADT=	25,950	# Lanes	Speed
2015 ADT=	26,088		
Kfactor =	0.060		
DHV=	1565	2	
Cars	1471	736	40
Medium Trucks	31	16	40
Heavy trucks	63	31	40

AREA 2: Aldiner Bender to West Road			
TNM Roadway NBML-2		Enter in TNM	
2014 ADT=	129,017	# Lanes	Speed
2015 ADT=	129,700		
Kfactor =	0.060		
DHV=	7782	4	
Cars	7315	1829	60
Medium Trucks	156	39	60
Heavy trucks	311	78	60

AREA 2: Aldiner Bender to West Road			
TNM Roadway NBFR-2		Enter in TNM	
2014 ADT=	16,596	# Lanes	Speed
2015 ADT=	16,684		
Kfactor =	0.060		
DHV=	1001	2	
Cars	941	470	40
Medium Trucks	20	10	40
Heavy trucks	40	20	40

AREA 2: Aldiner Bender to West Road			
TNM Roadway HOV-2		Enter in TNM	
2014 ADT=	16,070	# Lanes	Speed
2015 ADT=	16,155		
Kfactor =	0.060		
DHV=	969	1	
Cars	911	911	60
Medium Trucks	19	19	60
Heavy trucks	39	39	60

AREA 2: Aldiner Bender to West Road			
TNM Roadway SBML-2		Enter in TNM	
2014 ADT=	120,806	# Lanes	Speed
2015 ADT=	121,446		
Kfactor =	0.060		
DHV=	7287	4	
Cars	6850	1712	60
Medium Trucks	146	36	60
Heavy trucks	291	73	60

AREA 2: Aldiner Bender to West Road			
TNM Roadway SBFR-2		Enter in TNM	
2014 ADT=	20,600	# Lanes	Speed
2015 ADT=	20,709		
Kfactor =	0.060		
DHV=	1243	2	
Cars	1168	584	40
Medium Trucks	25	12	40
Heavy trucks	50	25	40

AREA 3: West Road to SH 249			
TNM Roadway NBML-3		Enter in TNM	
2014 ADT=	133,614	# Lanes	Speed
2015 ADT=	134,322		
Kfactor =	0.060		
DHV=	8059	4	
Cars	7576	1894	60
Medium Trucks	161	40	60
Heavy trucks	322	81	60

AREA 3: West Road to SH 249			
TNM Roadway NBFR-3		Enter in TNM	
2014 ADT=	13,913	# Lanes	Speed
2015 ADT=	13,987		
Kfactor =	0.060		
DHV=	839	2	
Cars	789	394	40
Medium Trucks	17	8	40
Heavy trucks	34	17	40

AREA 3: West Road to SH 249			
TNM Roadway HOV-3		Enter in TNM	
2014 ADT=	16,070	# Lanes	Speed
2015 ADT=	16,155		
Kfactor =	0.060		
DHV=	969	1	
Cars	911	911	60
Medium Trucks	19	19	60
Heavy trucks	39	39	60

AREA 3: West Road to SH 249			
TNM Roadway SBML-3		Enter in TNM	
2014 ADT=	123,671	# Lanes	Speed
2015 ADT=	124,326		
Kfactor =	0.060		
DHV=	7460	4	
Cars	7012	1753	60
Medium Trucks	149	37	60
Heavy trucks	298	75	60

AREA 3: West Road to SH 249			
TNM Roadway SBFR-3		Enter in TNM	
2014 ADT=	15,609	# Lanes	Speed
2015 ADT=	15,692		
Kfactor =	0.060		
DHV=	942	2	
Cars	885	443	40
Medium Trucks	19	9	40
Heavy trucks	38	19	40

AREA 4: SH 249 to W Gulf Bank Road			
TNM Roadway NBML-4		Enter in TNM	
2014 ADT=	135,666	# Lanes	Speed
2015 ADT=	136,385		
Kfactor =	0.060		
DHV=	8183	4	
Cars	7692	1923	60
Medium Trucks	164	41	60
Heavy trucks	327	82	60

AREA 4: SH 249 to W Gulf Bank Road			
TNM Roadway NBFR-4		Enter in TNM	
2014 ADT=	14,912	# Lanes	Speed
2015 ADT=	14,991		
Kfactor =	0.060		
DHV=	899	2	
Cars	845	423	40
Medium Trucks	18	9	40
Heavy trucks	36	18	40

AREA 4: SH 249 to W Gulf Bank Road			
TNM Roadway HOV-4		Enter in TNM	
2014 ADT=	16,070	# Lanes	Speed
2015 ADT=	16,155		
Kfactor =	0.060		
DHV=	969	1	
Cars	911	911	60
Medium Trucks	19	19	60
Heavy trucks	39	39	60

AREA 4: SH 249 to W Gulf Bank Road			
TNM Roadway SBML-4		Enter in TNM	
2014 ADT=	129,402	# Lanes	Speed
2015 ADT=	130,088		
Kfactor =	0.060		
DHV=	7805	4	
Cars	7337	1834	60
Medium Trucks	156	39	60
Heavy trucks	312	78	60

AREA 4: SH 249 to W Gulf Bank Road			
TNM Roadway SBFR-4		Enter in TNM	
2014 ADT=	15,274	# Lanes	Speed
2015 ADT=	15,355		
Kfactor =	0.060		
DHV=	921	2	
Cars	866	433	40
Medium Trucks	18	9	40
Heavy trucks	37	18	40

AREA 5: W Gulf Bank Road to Veterans Memorial			
TNM Roadway NBML-5		Enter in TNM	
2014 ADT=	137,288	# Lanes	Speed
2015 ADT=	138,016		
Kfactor =	0.060		
DHV=	8281	4	
Cars	7784	1946	60
Medium Trucks	166	41	60
Heavy trucks	331	83	60

AREA 5: W Gulf Bank Road to Veterans Memorial			
TNM Roadway NBFR-5		Enter in TNM	
2014 ADT=	14,075	# Lanes	Speed
2015 ADT=	14,150		
Kfactor =	0.060		
DHV=	849	2	
Cars	798	399	40
Medium Trucks	17	8	40
Heavy trucks	34	17	40

AREA 5: W Gulf Bank Road to Veterans Memorial			
TNM Roadway HOV-5		Enter in TNM	
2014 ADT=	16,070	# Lanes	Speed
2015 ADT=	16,155		
Kfactor =	0.060		
DHV=	969	1	
Cars	911	911	60
Medium Trucks	19	19	60
Heavy trucks	39	39	60

AREA 5: W Gulf Bank Road to Veterans Memorial			
TNM Roadway SBML-5		Enter in TNM	
2014 ADT=	124,456	# Lanes	Speed
2015 ADT=	125,116		
Kfactor =	0.060		
DHV=	7507	4	
Cars	7057	1764	60
Medium Trucks	150	38	60
Heavy trucks	300	75	60

AREA 5: W Gulf Bank Road to Veterans Memorial			
TNM Roadway SBFR-5		Enter in TNM	
2014 ADT=	15,715	# Lanes	Speed
2015 ADT=	15,799		
Kfactor =	0.060		
DHV=	948	2	
Cars	891	446	40
Medium Trucks	19	9	40
Heavy trucks	38	19	40

AREA 6: Veterans Memorial to Little York			
TNM Roadway NBML-6		Enter in TNM	
2014 ADT=	135,385	# Lanes	Speed
2015 ADT=	136,103		
Kfactor =	0.060		
DHV=	8166	4	
Cars	7676	1919	60
Medium Trucks	163	41	60
Heavy trucks	327	82	60

AREA 6: Veterans Memorial to Little York			
TNM Roadway NBFR-6		Enter in TNM	
2014 ADT=	12,731	# Lanes	Speed
2015 ADT=	12,798		
Kfactor =	0.060		
DHV=	768	2	
Cars	722	361	40
Medium Trucks	15	8	40
Heavy trucks	31	15	40

AREA 6: Veterans Memorial to Little York			
TNM Roadway HOV-6		Enter in TNM	
2014 ADT=	13,843	# Lanes	Speed
2015 ADT=	13,916		
Kfactor =	0.060		
DHV=	835	1	
Cars	785	785	60
Medium Trucks	17	17	60
Heavy trucks	33	33	60

AREA 6: Veterans Memorial to Little York			
TNM Roadway SBML-6		Enter in TNM	
2014 ADT=	124,622	# Lanes	Speed
2015 ADT=	125,282		
Kfactor =	0.060		
DHV=	7517	4	
Cars	7066	1766	60
Medium Trucks	150	38	60
Heavy trucks	301	75	60

AREA 6: Veterans Memorial to Little York			
TNM Roadway SBFR-6		Enter in TNM	
2014 ADT=	7,668	# Lanes	Speed
2015 ADT=	7,708		
Kfactor =	0.060		
DHV=	462	2	
Cars	435	217	40
Medium Trucks	9	5	40
Heavy trucks	18	9	40

AREA 7: Little York to Tidwell			
TNM Roadway NBML-7		Enter in TNM	
2014 ADT=	129,852	# Lanes	Speed
2015 ADT=	130,541		
Kfactor =	0.060		
DHV=	7832	4	
Cars	7362	1841	60
Medium Trucks	157	39	60
Heavy trucks	313	78	60

AREA 7: Little York to Tidwell			
TNM Roadway NBFR-7		Enter in TNM	
2014 ADT=	10,665	# Lanes	Speed
2015 ADT=	10,721		
Kfactor =	0.060		
DHV=	643	2	
Cars	605	302	40
Medium Trucks	13	6	40
Heavy trucks	26	13	40

AREA 7: Little York to Tidwell			
TNM Roadway HOV-7		Enter in TNM	
2014 ADT=	13,843	# Lanes	Speed
2015 ADT=	13,916		
Kfactor =	0.060		
DHV=	835	1	
Cars	785	785	60
Medium Trucks	17	17	60
Heavy trucks	33	33	60

AREA 7: Little York to Tidwell			
TNM Roadway SBML-7		Enter in TNM	
2014 ADT=	124,100	# Lanes	Speed
2015 ADT=	124,757		
Kfactor =	0.060		
DHV=	7485	4	
Cars	7036	1759	60
Medium Trucks	150	37	60
Heavy trucks	299	75	60

AREA 7: Little York to Tidwell			
TNM Roadway SBFR-7		Enter in TNM	
2014 ADT=	9,862	# Lanes	Speed
2015 ADT=	9,914		
Kfactor =	0.060		
DHV=	595	2	
Cars	559	280	40
Medium Trucks	12	6	40
Heavy trucks	24	12	40

AREA 8: Tidwell to Airline				
TNM Roadway NBML-8		Enter in TNM		
2014 ADT=	132,349	# Lanes	Speed	
2015 ADT=	133,050			
Kfactor =	0.060			
DHV=	7983	4		
Cars	7504	1876		60
Medium Trucks	160	40		60
Heavy trucks	319	80		60

AREA 8: Tidwell to Airline				
TNM Roadway NBFR-8		Enter in TNM		
2014 ADT=	11,733	# Lanes	Speed	
2015 ADT=	11,795			
Kfactor =	0.060			
DHV=	708	2		
Cars	665	333		40
Medium Trucks	14	7		40
Heavy trucks	28	14		40

AREA 8: Tidwell to Airline				
TNM Roadway HOV-8		Enter in TNM		
2014 ADT=	13,843	# Lanes	Speed	
2015 ADT=	13,916			
Kfactor =	0.060			
DHV=	835	1		
Cars	785	785		60
Medium Trucks	17	17		60
Heavy trucks	33	33		60

AREA 8: Tidwell to Airline				
TNM Roadway SBML-8		Enter in TNM		
2014 ADT=	126,478	# Lanes	Speed	
2015 ADT=	127,148			
Kfactor =	0.060			
DHV=	7629	4		
Cars	7171	1793		60
Medium Trucks	153	38		60
Heavy trucks	305	76		60

AREA 8: Tidwell to Airline				
TNM Roadway SBFR-8		Enter in TNM		
2014 ADT=	9,662	# Lanes	Speed	
2015 ADT=	9,713			
Kfactor =	0.060			
DHV=	583	2		
Cars	548	274		40
Medium Trucks	12	6		40
Heavy trucks	23	12		40

AREA 9: Airline to Stokes				
TNM Roadway NBML-9		Enter in TNM		
2014 ADT=	144,202	# Lanes	Speed	
2015 ADT=	144,967			
Kfactor =	0.060			
DHV=	8698	4		
Cars	8176	2044		60
Medium Trucks	174	43		60
Heavy trucks	348	87		60

AREA 9: Airline to Stokes				
TNM Roadway NBFR-9		Enter in TNM		
2014 ADT=	7,049	# Lanes	Speed	
2015 ADT=	7,086			
Kfactor =	0.060			
DHV=	425	2		
Cars	400	200		40
Medium Trucks	9	4		40
Heavy trucks	17	9		40

AREA 9: Airline to Stokes				
TNM Roadway HOV-9		Enter in TNM		
2014 ADT=	11,933	# Lanes	Speed	
2015 ADT=	11,996			
Kfactor =	0.060			
DHV=	720	1		
Cars	677	677		60
Medium Trucks	14	14		60
Heavy trucks	29	29		60

AREA 9: Airline to Stokes				
TNM Roadway SBML-9		Enter in TNM		
2014 ADT=	135,542	# Lanes	Speed	
2015 ADT=	136,261			
Kfactor =	0.060			
DHV=	8176	4		
Cars	7685	1921		60
Medium Trucks	164	41		60
Heavy trucks	327	82		60

AREA 9: Airline to Stokes				
TNM Roadway SBFR-9		Enter in TNM		
2014 ADT=	5,466	# Lanes	Speed	
2015 ADT=	5,495			
Kfactor =	0.060			
DHV=	330	2		
Cars	310	155		40
Medium Trucks	7	3		40
Heavy trucks	13	7		40

AREA 10: Stokes to I-610				
TNM Roadway NBML-10		Enter in TNM		
2014 ADT=	81,910	# Lanes	Speed	
2015 ADT=	82,344			
Kfactor =	0.060			
DHV=	4941	3		
Cars	4644	1548	60	
Medium Trucks	99	0	60	
Heavy trucks	198	66	60	

AREA 10: Stokes to I-610				
TNM Roadway SBML-10		Enter in TNM		
2014 ADT=	75,845	# Lanes	Speed	
2015 ADT=	76,247			
Kfactor =	0.060			
DHV=	4575	3		
Cars	4300	1433	60	
Medium Trucks	91	30	60	
Heavy trucks	183	61	60	

AREA 10: Stokes to I-610				
TNM Roadway NBFR-10		Enter in TNM		
2014 ADT=	1,408	# Lanes	Speed	
2015 ADT=	1,415			
Kfactor =	0.060			
DHV=	85	1		
Cars	80	80	40	
Medium Trucks	2	2	40	
Heavy trucks	3	3	40	

AREA 10: Stokes to I-610				
TNM Roadway SBFR-10		Enter in TNM		
2014 ADT=	107	# Lanes	Speed	
2015 ADT=	108			
Kfactor =	0.060			
DHV=	6	2		
Cars	6	3	40	
Medium Trucks	0	0	40	
Heavy trucks	0	0	40	

AREA 10: Stokes to I-610				
TNM Roadway HOV-10		Enter in TNM		
2014 ADT=	11,933	# Lanes	Speed	
2015 ADT=	11,996			
Kfactor =	0.060			
DHV=	720	1		
Cars	677	677	60	
Medium Trucks	14	14	60	
Heavy trucks	29	29	60	

TRAFFIC DATA FOR NOISE MODELING (YEAR 2035)
NHHIP - SEGMENT 1

MAINLANES
FRONTAGE ROADS
MANAGED LANES

Information needed
Calculated fields

QA/QC:
Source of traffic: CDM Smith, H-GAC modified regional travel demand model, received 1/29/15
Source of traffic factors: CDM Smith, raw traffic data for Segment 1 (IH45 south of Gulf Bank Road), received 2/6/15
Existing conditions - speed is posted; Predicted - Speed is design speed (rec'd from Joel S. on 3-6-15)
Assumptions:

- 1. traffic factors same for all segments
- 2. averaged daily traffic for smaller sections within each segment

ML & FR	
Growth Rate =	1%
Kfactor =	0.06
%Cars=	0.94
%Medium Trucks=	0.02
%Heavy Trucks=	0.04

AREA 1: BW 8 to Aldine Bender			
TNM Roadway NBML-1		Enter in TNM	
ADT=	143,628	# Lanes	Speed
Kfactor =	0.06		
DHV=	8,618	4	
Cars	8101	2025	60
Medium Trucks	172	43	60
Heavy trucks	345	86	60

AREA 1: BW 8 to Aldine Bender			
TNM Roadway NBFR-1		Enter in TNM	
ADT=	21,649	# Lanes	Speed
Kfactor =	0.06		
DHV=	1,299	3	
Cars	1221	407	45
Medium Trucks	26	9	45
Heavy trucks	52	17	45

AREA 1: BW 8 to Aldine Bender			
TNM Roadway HOV-1		Enter in TNM	
ADT=	14,060	# Lanes	Speed
Kfactor =	0.06		
DHV=	844	2	
Cars	793	396	60
Medium Trucks	17	8	60
Heavy trucks	34	17	60

AREA 1: BW 8 to Aldine Bender			
TNM Roadway SBML-1		Enter in TNM	
ADT=	136,583	# Lanes	Speed
Kfactor =	0.06		
DHV=	8,195	4	
Cars	7703	1926	60
Medium Trucks	164	41	60
Heavy trucks	328	82	60

AREA 1: BW 8 to Aldine Bender			
TNM Roadway SBFR-1		Enter in TNM	
ADT=	24,969	# Lanes	Speed
Kfactor =	0.06		
DHV=	1,498	3	
Cars	1408	469	45
Medium Trucks	30	10	45
Heavy trucks	60	20	45

AREA 1: BW 8 to Aldine Bender			
TNM Roadway SBHOV-1		Enter in TNM	
ADT=	24,512	# Lanes	Speed
Kfactor =	0.06		
DHV=	1,471	2	
Cars	1382	691	60
Medium Trucks	29	15	60
Heavy trucks	59	29	60

AREA 2: Aldiner Bender to West Road			
TNM Roadway NBML-2		Enter in TNM	
ADT=	149,038	# Lanes	Speed
Kfactor =	0.06		
DHV=	8,942	4	
Cars	8406	2101	60
Medium Trucks	179	45	60
Heavy trucks	358	89	60

AREA 2: Aldiner Bender to West Road			
TNM Roadway NBFR-2		Enter in TNM	
ADT=	17,794	# Lanes	Speed
Kfactor =	0.06		
DHV=	1,068	3	
Cars	1004	335	45
Medium Trucks	21	7	45
Heavy trucks	43	14	45

AREA 2: Aldiner Bender to West Road			
TNM Roadway HOV-2		Enter in TNM	
ADT=	31,310	# Lanes	Speed
Kfactor =	0.06		
DHV=	1,879	2	
Cars	1766	883	60
Medium Trucks	38	19	60
Heavy trucks	75	38	60

AREA 2: Aldiner Bender to West Road				
TNM Roadway SBML-2		Enter in TNM		
ADT=	141,490	# Lanes	Speed	
Kfactor =	0.06			
DHV=	8,489	4		
Cars	7980	1995	60	
Medium Trucks	170	42	60	
Heavy trucks	340	85	60	

AREA 2: Aldiner Bender to West Road				
TNM Roadway SBFR-2		Enter in TNM		
ADT=	24,645	# Lanes	Speed	
Kfactor =	0.06			
DHV=	1,479	3		
Cars	1390	463	45	
Medium Trucks	30	10	45	
Heavy trucks	59	20	45	

AREA 2: Aldiner Bender to West Road				
TNM Roadway SBHOV-2		Enter in TNM		
ADT=	37,540	# Lanes	Speed	
Kfactor =	0.06			
DHV=	2,252	2		
Cars	2117	1059	60	
Medium Trucks	45	23	60	
Heavy trucks	90	45	60	

AREA 3: West Road to SH 249				
TNM Roadway NBML-3		Enter in TNM		
ADT=	153,293	# Lanes	Speed	
Kfactor =	0.06			
DHV=	9,198	4		
Cars	8646	2161	60	
Medium Trucks	184	46	60	
Heavy trucks	368	92	60	

AREA 3: West Road to SH 249				
TNM Roadway NBFR-3		Enter in TNM		
ADT=	16,278	# Lanes	Speed	
Kfactor =	0.06			
DHV=	977	3		
Cars	918	306	45	
Medium Trucks	20	7	45	
Heavy trucks	39	13	45	

AREA 3: West Road to SH 249				
TNM Roadway NBHOV-3		Enter in TNM		
ADT=	31,310	# Lanes	Speed	
Kfactor =	0.06			
DHV=	1,879	2		
Cars	1766	883	60	
Medium Trucks	38	19	60	
Heavy trucks	75	38	60	

AREA 3: West Road to SH 249				
TNM Roadway SBML-3		Enter in TNM		
ADT=	146,606	# Lanes	Speed	
Kfactor =	0.06			
DHV=	8,796	4		
Cars	8269	2067	60	
Medium Trucks	176	44	60	
Heavy trucks	352	88	60	

AREA 3: West Road to SH 249				
TNM Roadway SBFR-3		Enter in TNM		
ADT=	17,896	# Lanes	Speed	
Kfactor =	0.06			
DHV=	1,074	3		
Cars	1009	336	45	
Medium Trucks	21	7	45	
Heavy trucks	43	14	45	

AREA 3: West Road to SH 249				
TNM Roadway SBHOV-3		Enter in TNM		
ADT=	37,540	# Lanes	Speed	
Kfactor =	0.06			
DHV=	2,252	2		
Cars	2117	1059	60	
Medium Trucks	45	23	60	
Heavy trucks	90	45	60	

AREA 4: SH 249 to W Gulf Bank Road				
TNM Roadway NBML-4		Enter in TNM		
ADT=	154,162	# Lanes	Speed	
Kfactor =	0.06			
DHV=	9,250	6		
Cars	8695	1449	60	
Medium Trucks	185	31	60	
Heavy trucks	370	62	60	

AREA 4: SH 249 to W Gulf Bank Road				
TNM Roadway NBFR-4		Enter in TNM		
ADT=	15,682	# Lanes	Speed	
Kfactor =	0.06			
DHV=	941	3		
Cars	884	295	45	
Medium Trucks	19	6	45	
Heavy trucks	38	13	45	

AREA 4: SH 249 to W Gulf Bank Road				
TNM Roadway NBHOV-4		Enter in TNM		
ADT=	20,392	# Lanes	Speed	
Kfactor =	0.06			
DHV=	1,224	2		
Cars	1150	575	60	
Medium Trucks	24	12	60	
Heavy trucks	49	24	60	

AREA 4: SH 249 to W Gulf Bank Road				
TNM Roadway SBML-4		Enter in TNM		
ADT=	146,921	# Lanes	Speed	
Kfactor =	0.06			
DHV=	8,815	6		
Cars	8286	1381		60
Medium Trucks	176	29		60
Heavy trucks	353	59		60

AREA 4: SH 249 to W Gulf Bank Road				
TNM Roadway SBFR-4		Enter in TNM		
ADT=	17,107	# Lanes	Speed	
Kfactor =	0.06			
DHV=	1,026	3		
Cars	965	322		45
Medium Trucks	21	7		45
Heavy trucks	41	14		45

AREA 4: SH 249 to W Gulf Bank Road				
TNM Roadway SBHOV-4		Enter in TNM		
ADT=	27,543	# Lanes	Speed	
Kfactor =	0.06			
DHV=	1,653	2		
Cars	1553	777		60
Medium Trucks	33	17		60
Heavy trucks	66	33		60

AREA 5: W Gulf Bank Road to Veterans Memorial				
TNM Roadway NBML-5		Enter in TNM		
ADT=	160,659	# Lanes	Speed	
Kfactor =	0.06			
DHV=	9,640	6		
Cars	9061	1510		60
Medium Trucks	193	32		60
Heavy trucks	386	64		60

AREA 5: W Gulf Bank Road to Veterans Memorial				
TNM Roadway NBFR-5		Enter in TNM		
ADT=	13,456	# Lanes	Speed	
Kfactor =	0.06			
DHV=	807	3		
Cars	759	253		45
Medium Trucks	16	5		45
Heavy trucks	32	11		45

AREA 5: W Gulf Bank Road to Veterans Memorial				
TNM Roadway NBHOV-5		Enter in TNM		
ADT=	20,392	# Lanes	Speed	
Kfactor =	0.06			
DHV=	1,224	2		
Cars	1150	575		60
Medium Trucks	24	12		60
Heavy trucks	49	24		60

AREA 5: W Gulf Bank Road to Veterans Memorial				
TNM Roadway SBML-5		Enter in TNM		
ADT=	150,727	# Lanes	Speed	
Kfactor =	0.06			
DHV=	9,044	6		
Cars	8501	1417		60
Medium Trucks	181	30		60
Heavy trucks	362	60		60

AREA 5: W Gulf Bank Road to Veterans Memorial				
TNM Roadway SBFR-5		Enter in TNM		
ADT=	14,161	# Lanes	Speed	
Kfactor =	0.06			
DHV=	850	3		
Cars	799	266		45
Medium Trucks	17	6		45
Heavy trucks	34	11		45

AREA 5: W Gulf Bank Road to Veterans Memorial				
TNM Roadway SBHOV-5		Enter in TNM		
ADT=	27,543	# Lanes	Speed	
Kfactor =	0.06			
DHV=	1,653	2		
Cars	1553	777		60
Medium Trucks	33	17		60
Heavy trucks	66	33		60

AREA 6: Veterans Memorial to Little York				
TNM Roadway NBML-6		Enter in TNM		
ADT=	135,834	# Lanes	Speed	
Kfactor =	0.06			
DHV=	8,150	4		
Cars	7661	1915		60
Medium Trucks	163	41		60
Heavy trucks	326	82		60

AREA 6: Veterans Memorial to Little York				
TNM Roadway NBFR-6		Enter in TNM		
ADT=	6,357	# Lanes	Speed	
Kfactor =	0.06			
DHV=	381	3		
Cars	359	120		45
Medium Trucks	8	3		45
Heavy trucks	15	5		45

AREA 6: Veterans Memorial to Little York				
TNM Roadway NBHOV-6		Enter in TNM		
ADT=	20,392	# Lanes	Speed	
Kfactor =	0.06			
DHV=	1,224	2		
Cars	1150	575		60
Medium Trucks	24	12		60
Heavy trucks	49	24		60

AREA 6: Veterans Memorial to Little York				
TNM Roadway SBML-6		Enter in TNM		
ADT=	136,296	# Lanes	Speed	
Kfactor =	0.06			
DHV=	8,178	4		
Cars	7687	1922	60	
Medium Trucks	164	41	60	
Heavy trucks	327	82	60	

AREA 6: Veterans Memorial to Little York				
TNM Roadway SBFR-6		Enter in TNM		
ADT=	11,722	# Lanes	Speed	
Kfactor =	0.06			
DHV=	703	3		
Cars	661	220	45	
Medium Trucks	14	5	45	
Heavy trucks	28	9	45	

AREA 6: Veterans Memorial to Little York				
TNM Roadway SBHOV-6		Enter in TNM		
ADT=	27,543	# Lanes	Speed	
Kfactor =	0.06			
DHV=	1,653	2		
Cars	1553	777	60	
Medium Trucks	33	17	60	
Heavy trucks	66	33	60	

AREA 7: Little York to Tidwell				
TNM Roadway NBML-7		Enter in TNM		
ADT=	135,819	# Lanes	Speed	
Kfactor =	0.06			
DHV=	8,149	5		
Cars	7660	1532	60	
Medium Trucks	163	33	60	
Heavy trucks	326	65	60	

AREA 7: Little York to Tidwell				
TNM Roadway NBFR-7		Enter in TNM		
ADT=	11,994	# Lanes	Speed	
Kfactor =	0.06			
DHV=	720	3		
Cars	676	225	45	
Medium Trucks	14	5	45	
Heavy trucks	29	10	45	

AREA 7: Little York to Tidwell				
TNM Roadway NBHOV-7		Enter in TNM		
ADT=	20,392	# Lanes	Speed	
Kfactor =	0.06			
DHV=	1,224	2		
Cars	1150	575	60	
Medium Trucks	24	12	60	
Heavy trucks	49	24	60	

AREA 7A: Little York to Tidwell				
TNM Roadway SBML-7A		Enter in TNM		
ADT=	134,258	# Lanes	Speed	
Kfactor =	0.06			
DHV=	8,055	4		
Cars	7572	1893	60	
Medium Trucks	161	40	60	
Heavy trucks	322	81	60	

AREA 7: Little York to Tidwell				
TNM Roadway SBFR-7		Enter in TNM		
ADT=	10,224	# Lanes	Speed	
Kfactor =	0.06			
DHV=	613	3		
Cars	577	192	45	
Medium Trucks	12	4	45	
Heavy trucks	25	8	45	

AREA 7: Little York to Tidwell				
TNM Roadway SBHOV-7		Enter in TNM		
ADT=	27,543	# Lanes	Speed	
Kfactor =	0.06			
DHV=	1,653	2		
Cars	1553	777	60	
Medium Trucks	33	17	60	
Heavy trucks	66	33	60	

AREA 7B: Little York to Tidwell - 5-lane section				
TNM Roadway SBML-7B		Enter in TNM		
ADT=	134,951	# Lanes	Speed	
Kfactor =	0.06			
DHV=	8,097	5		
Cars	7611	1522	60	
Medium Trucks	162	32	60	
Heavy trucks	324	65	60	

AREA 8: Tidwell to Airline				
TNM Roadway NBML-8		Enter in TNM		
ADT=	140,850	# Lanes	Speed	
Kfactor =	0.06			
DHV=	8,451	5		
Cars	7944	1589	60	
Medium Trucks	169	34	60	
Heavy trucks	338	68	60	

AREA 8: Tidwell to Airline				
TNM Roadway SBML-8		Enter in TNM		
ADT=	137,361	# Lanes	Speed	
Kfactor =	0.06			
DHV=	8,242	5		
Cars	7747	1549	60	
Medium Trucks	165	33	60	
Heavy trucks	330	66	60	

AREA 8: Tidwell to Airline				
TNM Roadway NBFR-8		Enter in TNM		
ADT=	13,025	# Lanes	Speed	
Kfactor =	0.06			
DHV=	782	3		
Cars	735	245	45	
Medium Trucks	16	5	45	
Heavy trucks	31	10	45	

AREA 8: Tidwell to Airline				
TNM Roadway SBFR-8		Enter in TNM		
ADT=	10,788	# Lanes	Speed	
Kfactor =	0			
DHV=	647.265	3		
Cars	608	203	45	
Medium Trucks	13	4	45	
Heavy trucks	26	9	45	

AREA 8: Tidwell to Airline				
TNM Roadway NBHOV-8		Enter in TNM		
ADT=	20,385	# Lanes	Speed	
Kfactor =	0.06			
DHV=	1,223	2		
Cars	1150	575	60	
Medium Trucks	24	12	60	
Heavy trucks	49	24	60	

AREA 8: Tidwell to Airline				
TNM Roadway SBHOV-8		Enter in TNM		
ADT=	27,542	# Lanes	Speed	
Kfactor =	0.06			
DHV=	1,653	2		
Cars	1553	777	60	
Medium Trucks	33	17	60	
Heavy trucks	66	33	60	

AREA 9: Airline to Stokes				
TNM Roadway NBML-9		Enter in TNM		
ADT=	148,148	# Lanes	Speed	
Kfactor =	0.06			
DHV=	8,889	6		
Cars	8356	1393	60	
Medium Trucks	178	30	60	
Heavy trucks	356	59	60	

AREA 9: Airline to Stokes				
TNM Roadway SBML-9		Enter in TNM		
ADT=	143,599	# Lanes	Speed	
Kfactor =	0.06			
DHV=	8,616	6		
Cars	8099	1350	60	
Medium Trucks	172	29	60	
Heavy trucks	345	57	60	

AREA 9: Airline to Stokes				
TNM Roadway NBFR-9		Enter in TNM		
ADT=	8,191	# Lanes	Speed	
Kfactor =	0.06			
DHV=	491	3		
Cars	462	154	45	
Medium Trucks	10	3	45	
Heavy trucks	20	7	45	

AREA 9: Airline to Stokes				
TNM Roadway SBFR-9		Enter in TNM		
ADT=	6,148	# Lanes	Speed	
Kfactor =	0.06			
DHV=	369	3		
Cars	347	116	45	
Medium Trucks	7	2	45	
Heavy trucks	15	5	45	

AREA 9: Airline to Stokes				
TNM Roadway NBHOV-9		Enter in TNM		
ADT=	20,385	# Lanes	Speed	
Kfactor =	0.06			
DHV=	1,223	2		
Cars	1150	575	60	
Medium Trucks	24	12	60	
Heavy trucks	49	24	60	

AREA 9: Airline to Stokes				
TNM Roadway SBHOV-9		Enter in TNM		
ADT=	27,542	# Lanes	Speed	
Kfactor =	0.06			
DHV=	1,653	2		
Cars	1553	777	60	
Medium Trucks	33	17	60	
Heavy trucks	66	33	60	

AREA 10: Stokes to I-610				
TNM Roadway NBML-10		Enter in TNM		
ADT=	96,406	# Lanes	Speed	
Kfactor =	0.06			
DHV=	5,784	4		
Cars	5437	1359	60	
Medium Trucks	116	29	60	
Heavy trucks	231	58	60	

AREA 10: Stokes to I-610				
TNM Roadway SBML-10		Enter in TNM		
ADT=	93,464	# Lanes	Speed	
Kfactor =	0.06			
DHV=	5,608	4		
Cars	5271	1318	60	
Medium Trucks	112	28	60	
Heavy trucks	224	56	60	

AREA 10: Stokes to I-610				
TNM Roadway NBFR-10		Enter in TNM		
ADT=	2,191	# Lanes	Speed	
Kfactor =	0.06			
DHV=	131	1		
Cars	124	124	45	
Medium Trucks	3	3	45	
Heavy trucks	5	5	45	

AREA 10: Stokes to I-610				
TNM Roadway SBFR-10		Enter in TNM		
ADT=	111	# Lanes	Speed	
Kfactor =	0.06			
DHV=	7	3		
Cars	6	2	45	
Medium Trucks	0	0	45	
Heavy trucks	0	0	45	

AREA 10: Stokes to I-610				
TNM Roadway NBHOV-10		Enter in TNM		
ADT=	20,385	# Lanes	Speed	
Kfactor =	0.06			
DHV=	1,223	2		
Cars	1150	575	60	
Medium Trucks	24	12	60	
Heavy trucks	49	24	60	

AREA 10: Stokes to I-610				
TNM Roadway SBHOV-10		Enter in TNM		
ADT=	27,542	# Lanes	Speed	
Kfactor =	0.06			
DHV=	1,653	2		
Cars	1553	777	60	
Medium Trucks	33	17	60	
Heavy trucks	66	33	60	

TRAFFIC DATA FOR NOISE MODELING (YEAR 2015)
NHHIP - SEGMENT 2

MAINLANES
FRONTAGE ROADS
MANAGED LANES

	Information needed
	Calculated fields

ML & FR	
Growth Rate =	1%
Kfactor =	0.06
%Cars=	0.94
%Medium Trucks=	0.02
%Heavy Trucks=	0.04

QA/QC:
Source of traffic: CDM Smith, H-GAC modified regional travel demand model, received 1/29/15
Source of traffic factors: CDM Smith, raw traffic data for Segment 1 (IH45 south of Gulf Bank Road), received 2/6/15
Existing conditions - speed is posted; Predicted - Speed is design speed (rec'd from Joel S. on 3-6-15)
Assumptions:
1. traffic factors same for all segments
2. averaged daily traffic for smaller sections within each segment
Updated on 1/20/16 to include the whole Segment 2 limits by SG

AREA 1: 610 to Link			
TNM Roadway NBML-1		Enter in TNM	
2014 ADT=	81,910	# Lanes	Speed
2015 ADT=	82,500		
Kfactor =	0.060		
DHV=	4950	4	
Cars	4653	1163	60
Medium Trucks	99	25	60
Heavy trucks	198	49	60

AREA 1: 610 to Link			
TNM Roadway NBFR-1		Enter in TNM	
2014 ADT=	0	# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	0	2	
Cars	0	0	40
Medium Trucks	0	0	40
Heavy trucks	0	0	40

AREA 1: 610 to Link			
TNM Roadway HOV-1		Enter in TNM	
2014 ADT=	11,933	# Lanes	Speed
2015 ADT=	12,019		
Kfactor =	0.060		
DHV=	721	1	
Cars	678	678	55
Medium Trucks	14	14	55
Heavy trucks	29	29	55

AREA 1: 610 to Link			
TNM Roadway SBML-1		Enter in TNM	
2014 ADT=	75,845	# Lanes	Speed
2015 ADT=	76,391		
Kfactor =	0.060		
DHV=	4583	4	
Cars	4308	1077	60
Medium Trucks	92	23	60
Heavy trucks	183	46	60

AREA 1: 610 to Link			
TNM Roadway SBFR-1		Enter in TNM	
2014 ADT=	1,419	# Lanes	Speed
2015 ADT=	1,429		
Kfactor =	0.060		
DHV=	86	2	
Cars	81	40	40
Medium Trucks	2	1	40
Heavy trucks	3	2	40

AREA 2: Link to Cavalcade			
TNM Roadway NBML-2		Enter in TNM	
2014 ADT=	94,604	# Lanes	Speed
2015 ADT=	95,285		
Kfactor =	0.060		
DHV=	5717	4	
Cars	5374	1344	60
Medium Trucks	114	29	60
Heavy trucks	229	57	60

AREA 2: Link to Cavalcade			
TNM Roadway NBFR-2		Enter in TNM	
2014 ADT=	5,134	# Lanes	Speed
2015 ADT=	5,171		
Kfactor =	0.060		
DHV=	310	2	
Cars	292	146	40
Medium Trucks	6	3	40
Heavy trucks	12	6	40

AREA 2: Link to Cavalcade			
TNM Roadway HOV-2		Enter in TNM	
2014 ADT=	11,933	# Lanes	Speed
2015 ADT=	12,019		
Kfactor =	0.060		
DHV=	721	1	
Cars	678	678	55
Medium Trucks	14	14	55
Heavy trucks	29	29	55

AREA 2: Link to Cavalcade			
TNM Roadway SBML-2		Enter in TNM	
2014 ADT=	85,756	# Lanes	Speed
2015 ADT=	86,373		
Kfactor =	0.060		
DHV=	5182	4	
Cars	4871	1218	60
Medium Trucks	104	26	60
Heavy trucks	207	52	60

AREA 2: Link to Cavalcade			
TNM Roadway SBFR-2		Enter in TNM	
2014 ADT=	5,745	# Lanes	Speed
2015 ADT=	5,786		
Kfactor =	0.060		
DHV=	347	2	
Cars	326	163	40
Medium Trucks	7	3	40
Heavy trucks	14	7	40

AREA 3: Cavalcade to Patton			
TNM Roadway NBML-3		Enter in TNM	
2014 ADT=	91,696	# Lanes	Speed
2015 ADT=	92,356		
Kfactor =	0.060		
DHV=	5541	4	
Cars	5209	1302	60
Medium Trucks	111	28	60
Heavy trucks	222	55	60

AREA 3: Cavalcade to Patton			
TNM Roadway NBFR-3		Enter in TNM	
2014 ADT=	1,280	# Lanes	Speed
2015 ADT=	1,289		
Kfactor =	0.060		
DHV=	77	2	
Cars	73	36	40
Medium Trucks	2	1	40
Heavy trucks	3	2	40

AREA 3: Cavalcade to Patton			
TNM Roadway HOV-3		Enter in TNM	
2014 ADT=	11,933	# Lanes	Speed
2015 ADT=	12,019		
Kfactor =	0.060		
DHV=	721	1	
Cars	678	678	55
Medium Trucks	14	14	55
Heavy trucks	29	29	55

AREA 3: Cavalcade to Patton			
TNM Roadway SBML-3		Enter in TNM	
2014 ADT=	91,748	# Lanes	Speed
2015 ADT=	92,408		
Kfactor =	0.060		
DHV=	5544	4	
Cars	5212	1303	60
Medium Trucks	111	28	60
Heavy trucks	222	55	60

AREA 3: Cavalcade to Patton			
TNM Roadway SBFR-3		Enter in TNM	
2014 ADT=	2,787	# Lanes	Speed
2015 ADT=	2,807		
Kfactor =	0.060		
DHV=	168	2	
Cars	158	79	40
Medium Trucks	3	2	40
Heavy trucks	7	3	40

AREA 4: Patton to N Main St			
TNM Roadway NBML-4		Enter in TNM	
2014 ADT=	97,112	# Lanes	Speed
2015 ADT=	97,812		
Kfactor =	0.060		
DHV=	5869	4	
Cars	5517	1379	60
Medium Trucks	117	29	60
Heavy trucks	235	59	60

AREA 4: Patton to N Main St			
TNM Roadway NBFR-4		Enter in TNM	
2014 ADT=	3,195	# Lanes	Speed
2015 ADT=	3,218		
Kfactor =	0.060		
DHV=	193	2	
Cars	181	91	40
Medium Trucks	4	2	40
Heavy trucks	8	4	40

AREA 4: Patton to N Main St			
TNM Roadway HOV-4		Enter in TNM	
2014 ADT=	11,933	# Lanes	Speed
2015 ADT=	12,019		
Kfactor =	0.060		
DHV=	721	1	
Cars	678	678	55
Medium Trucks	14	14	55
Heavy trucks	29	29	55

AREA 4: Patton to N Main St			
TNM Roadway SBML-4		Enter in TNM	
2014 ADT=	87,488	# Lanes	Speed
2015 ADT=	88,118		
Kfactor =	0.060		
DHV=	5287	4	
Cars	4970	1242	60
Medium Trucks	106	26	60
Heavy trucks	211	53	60

AREA 4: Patton to N Main St			
TNM Roadway SBFR-4		Enter in TNM	
2014 ADT=	6,445	# Lanes	Speed
2015 ADT=	6,491		
Kfactor =	0.060		
DHV=	389	2	
Cars	366	183	40
Medium Trucks	8	4	40
Heavy trucks	16	8	40

AREA 5: N Main St to Quitman			
TNM Roadway NBML-5		Enter in TNM	
2014 ADT=	99,595	# Lanes	Speed
2015 ADT=	100,312		
Kfactor =	0.060		
DHV=	6019	4	
Cars	5658	1414	60
Medium Trucks	120	30	60
Heavy trucks	241	60	60

AREA 5: N Main St to Quitman			
TNM Roadway NBFR-5		Enter in TNM	
2014 ADT=	4,114	# Lanes	Speed
2015 ADT=	4,144		
Kfactor =	0.060		
DHV=	249	2	
Cars	234	117	40
Medium Trucks	5	2	40
Heavy trucks	10	5	40

AREA 5: N Main St to Quitman			
TNM Roadway HOV-5		Enter in TNM	
2014 ADT=	9,787	# Lanes	Speed
2015 ADT=	9,857		
Kfactor =	0.060		
DHV=	591	1	
Cars	556	556	60
Medium Trucks	12	12	60
Heavy trucks	24	24	60

AREA 5: N Main St to Quitman			
TNM Roadway SBML-5		Enter in TNM	
2014 ADT=	88,936	# Lanes	Speed
2015 ADT=	89,576		
Kfactor =	0.060		
DHV=	5375	4	
Cars	5052	1263	60
Medium Trucks	107	27	60
Heavy trucks	215	54	60

AREA 5: N Main St to Quitman			
TNM Roadway SBFR-5		Enter in TNM	
2014 ADT=	2,813	# Lanes	Speed
2015 ADT=	2,833		
Kfactor =	0.060		
DHV=	170	2	
Cars	160	80	40
Medium Trucks	3	2	40
Heavy trucks	7	3	40

AREA 6: Quitman to I-10 Ramps			
TNM Roadway NBML-6		Enter in TNM	
2014 ADT=	98,819	# Lanes	Speed
2015 ADT=	99,530		
Kfactor =	0.060		
DHV=	5972	4	
Cars	5614	1403	60
Medium Trucks	119	30	60
Heavy trucks	239	60	60

AREA 6: Quitman to I-10 Ramps			
TNM Roadway HOV-6		Enter in TNM	
2014 ADT=	9,787	# Lanes	Speed
2015 ADT=	9,857		
Kfactor =	0.060		
DHV=	591	1	
Cars	556	556	60
Medium Trucks	12	12	60
Heavy trucks	24	24	60

AREA 6: Quitman to I-10 Ramps			
TNM Roadway SBML-6		Enter in TNM	
2014 ADT=	88,956	# Lanes	Speed
2015 ADT=	89,596		
Kfactor =	0.060		
DHV=	5376	4	
Cars	5053	1263	60
Medium Trucks	108	27	60
Heavy trucks	215	54	60

AREA 7: I-610 N Main St to Airline			
TNM Roadway WBML-7		Enter in TNM	
2014 ADT=	119,839	# Lanes	Speed
2015 ADT=	120,702		
Kfactor =	0.060		
DHV=	7242	4	
Cars	6808	1702	60
Medium Trucks	145	36	60
Heavy trucks	290	72	60

AREA 7: I-610 N Main St to Airline			
TNM Roadway EBML-7		Enter in TNM	
2014 ADT=	121,248	# Lanes	Speed
2015 ADT=	122,121		
Kfactor =	0.060		
DHV=	7327	4	
Cars	6888	1722	60
Medium Trucks	147	37	60
Heavy trucks	293	73	60

AREA 7: I-610 N Main St to Airline			
TNM Roadway WBFR-7		Enter in TNM	
2014 ADT=	6,839	# Lanes	Speed
2015 ADT=	6,888		
Kfactor =	0.060		
DHV=	413	2	
Cars	388	194	40
Medium Trucks	8	4	40
Heavy trucks	17	8	40

AREA 7: I-610 N Main St to Airline			
TNM Roadway EBFR-7		Enter in TNM	
2014 ADT=	4,357	# Lanes	Speed
2015 ADT=	4,388		
Kfactor =	0.060		
DHV=	263	3	
Cars	248	83	40
Medium Trucks	5	2	40
Heavy trucks	11	4	40

AREA 8: I-610 Airline to I-610			
TNM Roadway WBML-8		Enter in TNM	
2014 ADT=	67,335	# Lanes	Speed
2015 ADT=	67,820		
Kfactor =	0.060		
DHV=	4069	2	
Cars	3825	1913	60
Medium Trucks	81	41	60
Heavy trucks	163	81	60

AREA 8: I-610 Airline to I-610			
TNM Roadway WBFR-8		Enter in TNM	
2014 ADT=	11	# Lanes	Speed
2015 ADT=	11		
Kfactor =	0.060		
DHV=	1	3	
Cars	1	0	40
Medium Trucks	0	0	40
Heavy trucks	0	0	40

AREA 8: I-610 Airline to I-45			
TNM Roadway EBML-8		Enter in TNM	
2014 ADT=	67,990	# Lanes	Speed
2015 ADT=	68,480		
Kfactor =	0.060		
DHV=	4109	2	
Cars	3862	1931	60
Medium Trucks	82	41	60
Heavy trucks	164	82	60

AREA 8: I-610 Airline to I-45			
TNM Roadway EBFR-8		Enter in TNM	
2014 ADT=	1,419	# Lanes	Speed
2015 ADT=	1,429		
Kfactor =	0.060		
DHV=	86	2	
Cars	81	40	40
Medium Trucks	2	1	40
Heavy trucks	3	2	40

AREA 9: I-610 I-45 to Fulton			
TNM Roadway WBML-9		Enter in TNM	
2014 ADT=	67,335	# Lanes	Speed
2015 ADT=	67,820		
Kfactor =	0.060		
DHV=	4069	2	
Cars	3825	1913	60
Medium Trucks	81	41	60
Heavy trucks	163	81	60

AREA 9: I-610 I-45 to Fulton			
TNM Roadway WBFR-9		Enter in TNM	
2014 ADT=	1,408	# Lanes	Speed
2015 ADT=	1,418		
Kfactor =	0.060		
DHV=	85	1	
Cars	80	80	40
Medium Trucks	2	2	40
Heavy trucks	3	3	40

AREA 9: I-610 I-45 to Fulton			
TNM Roadway EBML-9		Enter in TNM	
2014 ADT=	67,990	# Lanes	Speed
2015 ADT=	68,480		
Kfactor =	0.060		
DHV=	4109	2	
Cars	3862	1931	60
Medium Trucks	82	41	60
Heavy trucks	164	82	60

AREA 9: I-610 I-45 to Fulton			
TNM Roadway EBFR-9		Enter in TNM	
2014 ADT=	0	# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	0	3	
Cars	0	0	40
Medium Trucks	0	0	40
Heavy trucks	0	0	40

AREA 10: I-610 Fulton to Irvington			
TNM Roadway WBML-10		Enter in TNM	
2014 ADT=	96,047	# Lanes	Speed
2015 ADT=	96,739		
Kfactor =	0.060		
DHV=	5804	5	
Cars	5456	1091	60
Medium Trucks	116	23	60
Heavy trucks	232	46	60

AREA 10: I-610 Fulton to Irvington			
TNM Roadway WBFR-10		Enter in TNM	
2014 ADT=	4,601	# Lanes	Speed
2015 ADT=	4,634		
Kfactor =	0.060		
DHV=	278	3	
Cars	261	87	40
Medium Trucks	6	2	40
Heavy trucks	11	4	40

AREA 10: I-610 Fulton to Irvington			
TNM Roadway EBML-10		Enter in TNM	
2014 ADT=	99,810	# Lanes	Speed
2015 ADT=	100,529		
Kfactor =	0.060		
DHV=	6032	5	
Cars	5670	1134	60
Medium Trucks	121	24	60
Heavy trucks	241	48	60

AREA 10: I-610 Fulton to Irvington			
TNM Roadway EBFR-10		Enter in TNM	
2014 ADT=	1,959	# Lanes	Speed
2015 ADT=	1,973		
Kfactor =	0.060		
DHV=	118	2	
Cars	111	56	40
Medium Trucks	2	1	40
Heavy trucks	5	2	40

AREA 11: 45/610 DC I-610 WB to I-45 NB			
TNM Roadway		Enter in TNM	
2014 ADT=	25,343	# Lanes	Speed
2015 ADT=	25,525		
Kfactor =	0.060		
DHV=	1532	2	
Cars	1440	720	45
Medium Trucks	31	15	45
Heavy trucks	61	31	45

AREA 11: 45/610 DC I-610 WB to I-45 SB			
TNM Roadway		Enter in TNM	
2014 ADT=	6,383	# Lanes	Speed
2015 ADT=	6,429		
Kfactor =	0.060		
DHV=	386	2	
Cars	363	181	45
Medium Trucks	8	4	45
Heavy trucks	15	8	45

AREA 11: 45/610 DC I-610 EB to I-45 NB			
TNM Roadway		Enter in TNM	
2014 ADT=	45,138	# Lanes	Speed
2015 ADT=	45,463		
Kfactor =	0.060		
DHV=	2728	2	
Cars	2564	1282	45
Medium Trucks	55	27	45
Heavy trucks	109	55	45

AREA 11: 45/610 DC I-610 EB to I-45 SB			
TNM Roadway		Enter in TNM	
2014 ADT=	7,666	# Lanes	Speed
2015 ADT=	7,721		
Kfactor =	0.060		
DHV=	463	2	
Cars	435	218	45
Medium Trucks	9	5	45
Heavy trucks	19	9	45

AREA 11: 45/610 DC I-45 NB to I-610 WB			
TNM Roadway		Enter in TNM	
2014 ADT=	10,419	# Lanes	Speed
2015 ADT=	10,494		
Kfactor =	0.060		
DHV=	630	2	
Cars	592	296	45
Medium Trucks	13	6	45
Heavy trucks	25	13	45

AREA 11: 45/610 DC I-45 NB to I-610 EB			
TNM Roadway		Enter in TNM	
2014 ADT=	6,357	# Lanes	Speed
2015 ADT=	6,403		
Kfactor =	0.060		
DHV=	384	2	
Cars	361	181	45
Medium Trucks	8	4	45
Heavy trucks	15	8	45

AREA 11: 45/610 DC I-45 SB to I-610 WB			
TNM Roadway		Enter in TNM	
2014 ADT=	38,244	# Lanes	Speed
2015 ADT=	38,519		
Kfactor =	0.060		
DHV=	2311	2	
Cars	2172	1086	45
Medium Trucks	46	23	45
Heavy trucks	92	46	45

AREA 11: 45/610 DC I-45 SB to I-610 EB			
TNM Roadway		Enter in TNM	
2014 ADT=	27,362	# Lanes	Speed
2015 ADT=	27,559		
Kfactor =	0.060		
DHV=	1654	2	
Cars	1554	777	45
Medium Trucks	33	17	45
Heavy trucks	66	33	45

TRAFFIC DATA FOR NOISE MODELING (YEAR 2035)
NHHIP - SEGMENT 2

MAINLANES
FRONTAGE ROADS
MANAGED LANES

	Information needed
	Calculated fields

QA/QC:

Source of traffic: CDM Smith, H-GAC modified regional travel demand model, received 1/29/15

Source of traffic factors: CDM Smith, raw traffic data for Segment 1 (IH45 south of Gulf Bank Road), received 2/6/15

Existing conditions - speed is posted; Predicted - Speed is design speed (rec'd from Joel S. on 3-6-15)

Assumptions:

1. traffic factors same for all segments
2. averaged daily traffic for smaller sections within each segment

Updated on 1/20/16 to include the whole Segment 2 limits by SG

ML & FR	
Growth Rate =	1%
Kfactor =	0.06
%Cars=	0.94
%Medium Trucks=	0.02
%Heavy Trucks=	0.04

AREA 1: 610 to Link			
TNM Roadway NBML-1		Enter in TNM	
ADT=	96,406	# Lanes	Speed
Kfactor =	0.06		
DHV=	5,784	4	
Cars	5437	1359	60
Medium Trucks	116	29	60
Heavy trucks	231	58	60

AREA 1: 610 to Link			
TNM Roadway NBFR-1		Enter in TNM	
ADT=	0	# Lanes	Speed
Kfactor =	0.06		
DHV=	0	3	
Cars	0	0	45
Medium Trucks	0	0	45
Heavy trucks	0	0	45

AREA 1: 610 to Link			
TNM Roadway HOV-1		Enter in TNM	
ADT=	20,385	# Lanes	Speed
Kfactor =	0.06		
DHV=	1,223	2	
Cars	1150	575	60
Medium Trucks	24	12	60
Heavy trucks	49	24	60

AREA 1: 610 to Link			
TNM Roadway SBML-1		Enter in TNM	
ADT=	93,464	# Lanes	Speed
Kfactor =	0.06		
DHV=	5,608	4	
Cars	5271	1318	60
Medium Trucks	112	28	60
Heavy trucks	224	56	60

AREA 1: 610 to Link			
TNM Roadway SBFR-1		Enter in TNM	
ADT=	1,687	# Lanes	Speed
Kfactor =	0.06		
DHV=	101	1	
Cars	95	95	45
Medium Trucks	2	2	45
Heavy trucks	4	4	45

AREA 1: 610 to Link			
TNM Roadway SBHOV-1		Enter in TNM	
ADT=	27,542	# Lanes	Speed
Kfactor =	0.06		
DHV=	1,653	2	
Cars	1553	777	60
Medium Trucks	33	17	60
Heavy trucks	66	33	60

AREA 2: Link to Cavalcade			
TNM Roadway NBML-2		Enter in TNM	
ADT=	106,443	# Lanes	Speed
Kfactor =	0.06		
DHV=	6,387	4	
Cars	6003	1501	60
Medium Trucks	128	32	60
Heavy trucks	255	64	60

AREA 2: Link to Cavalcade			
TNM Roadway NBFR-2		Enter in TNM	
ADT=	5,468	# Lanes	Speed
Kfactor =	0.06		
DHV=	328	3	
Cars	308	103	45
Medium Trucks	7	2	45
Heavy trucks	13	4	45

AREA 2: Link to Cavalcade			
TNM Roadway HOV-2		Enter in TNM	
ADT=	20,385	# Lanes	Speed
Kfactor =	0.06		
DHV=	1,223	2	
Cars	1150	575	60
Medium Trucks	24	12	60
Heavy trucks	49	24	60

AREA 2: Link to Cavalcade			
TNM Roadway SBML-2		Enter in TNM	
.	105,056	# Lanes	Speed
Kfactor =	0.06		
DHV=	6,303	4	
Cars	5925	1481	60
Medium Trucks	126	32	60
Heavy trucks	252	63	60

AREA 2: Link to Cavalcade			
TNM Roadway SBFR-2		Enter in TNM	
ADT=	5,985	# Lanes	Speed
Kfactor =	0.06		
DHV=	359	1	
Cars	338	338	45
Medium Trucks	7	7	45
Heavy trucks	14	14	45

AREA 2: Link to Cavalcade			
TNM Roadway SBHOV-2		Enter in TNM	
ADT=	27,542	# Lanes	Speed
Kfactor =	0.06		
DHV=	1,653	2	
Cars	1553	777	60
Medium Trucks	33	17	60
Heavy trucks	66	33	60

AREA 3: Cavalcade to Patton			
TNM Roadway NBML-3		Enter in TNM	
ADT=	107,978	# Lanes	Speed
Kfactor =	0.06		
DHV=	6,479	4	
Cars	6090	1522	60
Medium Trucks	130	32	60
Heavy trucks	259	65	60

AREA 3: Cavalcade to Patton			
TNM Roadway NBFR-3		Enter in TNM	
ADT=	1,345	# Lanes	Speed
Kfactor =	0.06		
DHV=	81	3	
Cars	76	25	45
Medium Trucks	2	1	45
Heavy trucks	3	1	45

AREA 3: Cavalcade to Patton			
TNM Roadway HOV-3		Enter in TNM	
ADT=	20,385	# Lanes	Speed
Kfactor =	0.06		
DHV=	1,223	2	
Cars	1150	575	60
Medium Trucks	24	12	60
Heavy trucks	49	24	60

AREA 3: Cavalcade to Patton			
TNM Roadway SBML-3		Enter in TNM	
ADT=	106,325	# Lanes	Speed
Kfactor =	0.06		
DHV=	6,379	4	
Cars	5997	1499	60
Medium Trucks	128	32	60
Heavy trucks	255	64	60

AREA 3: Cavalcade to Patton			
TNM Roadway SBFR-3		Enter in TNM	
ADT=	3,136	# Lanes	Speed
Kfactor =	0.06		
DHV=	188	1	
Cars	177	177	45
Medium Trucks	4	4	45
Heavy trucks	8	8	45

AREA 3: Cavalcade to Patton			
TNM Roadway SBHOV-3		Enter in TNM	
ADT=	27,542	# Lanes	Speed
Kfactor =	0.06		
DHV=	1,653	2	
Cars	1553	777	60
Medium Trucks	33	17	60
Heavy trucks	66	33	60

AREA 4: Patton to N Main St			
TNM Roadway NBML-4		Enter in TNM	
ADT=	108,760	# Lanes	Speed
Kfactor =	0.06		
DHV=	6,526	4	
Cars	6134	1534	60
Medium Trucks	131	33	60
Heavy trucks	261	65	60

AREA 4: Patton to N Main St			
TNM Roadway NBFR-4		Enter in TNM	
ADT=	3,479	# Lanes	Speed
Kfactor =	0.06		
DHV=	209	3	
Cars	196	65	45
Medium Trucks	4	1	45
Heavy trucks	8	3	45

AREA 4: Patton to N Main St			
TNM Roadway HOV-4		Enter in TNM	
ADT=	20,385	# Lanes	Speed
Kfactor =	0.06		
DHV=	1,223	2	
Cars	1150	575	60
Medium Trucks	24	12	60
Heavy trucks	49	24	60

AREA 4: Patton to N Main St			
TNM Roadway SBML-4		Enter in TNM	
ADT=	106,161	# Lanes	Speed
Kfactor =	0.06		
DHV=	6,370	4	
Cars	5987	1497	60
Medium Trucks	127	32	60
Heavy trucks	255	64	60

AREA 4: Patton to N Main St			
TNM Roadway SBFR-4		Enter in TNM	
ADT=	7,702	# Lanes	Speed
Kfactor =	0.06		
DHV=	462	1	
Cars	434	434	45
Medium Trucks	9	9	45
Heavy trucks	18	18	45

AREA 4: Patton to N Main St			
TNM Roadway SBHOV-4		Enter in TNM	
ADT=	27,542	# Lanes	Speed
Kfactor =	0.06		
DHV=	1,653	2	
Cars	1553	777	60
Medium Trucks	33	17	60
Heavy trucks	66	33	60

AREA 5: N Main St to Quitman			
TNM Roadway NBML-5		Enter in TNM	
ADT=	110,668	# Lanes	Speed
Kfactor =	0.06		
DHV=	6,640	6	
Cars	6242	1040	60
Medium Trucks	133	22	60
Heavy trucks	266	44	60

AREA 5: N Main St to Quitman			
TNM Roadway NBFR-5		Enter in TNM	
ADT=	3,257	# Lanes	Speed
Kfactor =	0.06		
DHV=	195	2	
Cars	184	92	45
Medium Trucks	4	2	45
Heavy trucks	8	4	45

AREA 5: N Main St to Quitman			
TNM Roadway HOV-5		Enter in TNM	
ADT=	20,385	# Lanes	Speed
Kfactor =	0.06		
DHV=	1,223	2	
Cars	1150	575	60
Medium Trucks	24	12	60
Heavy trucks	49	24	60

AREA 5: N Main St to Quitman			
TNM Roadway SBML-5		Enter in TNM	
ADT=	106,849	# Lanes	Speed
Kfactor =	0.06		
DHV=	6,411	5	
Cars	6026	1205	60
Medium Trucks	128	26	60
Heavy trucks	256	51	60

AREA 5: N Main St to Quitman			
TNM Roadway SBFR-5		Enter in TNM	
ADT=	2,619	# Lanes	Speed
Kfactor =	0.00		
DHV=	0	1	
Cars	0	0	45
Medium Trucks	0	0	45
Heavy trucks	0	0	45

AREA 5: N Main St to Quitman			
TNM Roadway SBHOV-2		Enter in TNM	
ADT=	27,542	# Lanes	Speed
Kfactor =	0.06		
DHV=	1,653	2	
Cars	1553	777	60
Medium Trucks	33	17	60
Heavy trucks	66	33	60

AREA 6: Quitman to I-10 Ramps			
TNM Roadway NBML-6		Enter in TNM	
ADT=	106,719	# Lanes	Speed
Kfactor =	0.06		
DHV=	6,403	4	
Cars	6019	1505	60
Medium Trucks	128	32	60
Heavy trucks	256	64	60

AREA 6: Quitman to I-10 Ramps			
TNM Roadway NBHOV-3		Enter in TNM	
ADT=	20,385	# Lanes	Speed
Kfactor =	0.06		
DHV=	1,223	2	
Cars	1150	575	60
Medium Trucks	24	12	60
Heavy trucks	49	24	60

AREA 6: Quitman to I-10 Ramps			
TNM Roadway SBML-6		Enter in TNM	
ADT=	109,289	# Lanes	Speed
Kfactor =	0.06		
DHV=	6,557	4	
Cars	6164	1541	60
Medium Trucks	131	33	60
Heavy trucks	262	66	60

AREA 6: Quitman to I-10 Ramps			
TNM Roadway SBHOV-3		Enter in TNM	
ADT=	27,542	# Lanes	Speed
Kfactor =	0.06		
DHV=	1,653	2	
Cars	1553	777	60
Medium Trucks	33	17	60
Heavy trucks	66	33	60

AREA 7: I-610 N Main St to Airline			
TNM Roadway WBML-7		Enter in TNM	
ADT=	131,882	# Lanes	Speed
Kfactor =	0.060		
DHV=	7913	4	
Cars	7438	1860	60
Medium Trucks	158	40	60
Heavy trucks	317	79	60

AREA 7: I-610 N Main St to Airline			
TNM Roadway WBFR-7		Enter in TNM	
ADT=	9,095	# Lanes	Speed
Kfactor =	0.060		
DHV=	546	2	
Cars	513	256	40
Medium Trucks	11	5	40
Heavy trucks	22	11	40

AREA 7: I-610 N Main St to Airline			
TNM Roadway EBML-7		Enter in TNM	
ADT=	137,493	# Lanes	Speed
Kfactor =	0.060		
DHV=	8250	4	
Cars	7755	1939	60
Medium Trucks	165	41	60
Heavy trucks	330	82	60

AREA 5: I-610 N Main St to Airline			
TNM Roadway EBFR-7		Enter in TNM	
ADT=	6,100	# Lanes	Speed
Kfactor =	0.060		
DHV=	366	3	
Cars	344	115	40
Medium Trucks	7	2	40
Heavy trucks	15	5	40

AREA 8: I-610 Airline to I-45			
TNM Roadway WBML-8		Enter in TNM	
ADT=	89,762	# Lanes	Speed
Kfactor =	0.060		
DHV=	5386	3	
Cars	5063	1688	60
Medium Trucks	108	36	60
Heavy trucks	215	72	60

AREA 8: I-610 Airline to I-45			
TNM Roadway WBFR-8		Enter in TNM	
ADT=	13	# Lanes	Speed
Kfactor =	0.060		
DHV=	1	2	
Cars	1	0	40
Medium Trucks	0	0	40
Heavy trucks	0	0	40

AREA 8: I-610 Airline to I-45			
TNM Roadway EBML-8		Enter in TNM	
ADT=	91,179	# Lanes	Speed
Kfactor =	0.060		
DHV=	5471	3	
Cars	5142	1714	60
Medium Trucks	109	36	60
Heavy trucks	219	73	60

AREA 8: I-610 Airline to I-45			
TNM Roadway EBFR-8		Enter in TNM	
ADT=	1,687	# Lanes	Speed
Kfactor =	0.060		
DHV=	101	2	
Cars	95	48	40
Medium Trucks	2	1	40
Heavy trucks	4	2	40

AREA 9: I-610 I-45 to Fulton			
TNM Roadway WBML-9		Enter in TNM	
ADT=	89,762	# Lanes	Speed
Kfactor =	0.060		
DHV=	5386	3	
Cars	5063	1688	60
Medium Trucks	108	36	60
Heavy trucks	215	72	60

AREA 9: I-610 I-45 to Fulton			
TNM Roadway WBFR-9		Enter in TNM	
ADT=	2,191	# Lanes	Speed
Kfactor =	0.060		
DHV=	131	2	
Cars	124	62	40
Medium Trucks	3	1	40
Heavy trucks	5	3	40

AREA 9: I-610 I-45 to Fulton			
TNM Roadway EBML-9		Enter in TNM	
ADT=	91,179	# Lanes	Speed
Kfactor =	0.060		
DHV=	5471	3	
Cars	5142	1714	60
Medium Trucks	109	36	60
Heavy trucks	219	73	60

AREA 9: I-610 I-45 to Fulton			
TNM Roadway EBFR-9		Enter in TNM	
ADT=	0	# Lanes	Speed
Kfactor =	0.060		
DHV=	0	2	
Cars	0	0	40
Medium Trucks	0	0	40
Heavy trucks	0	0	40

AREA 10: I-610 Fulton to Irvington			
TNM Roadway WBML-10		Enter in TNM	
ADT=	119,976	# Lanes	Speed
Kfactor =	0.060		
DHV=	7199	5	
Cars	6767	1353	60
Medium Trucks	144	29	60
Heavy trucks	288	58	60

AREA 10: I-610 Fulton to Irvington			
TNM Roadway WBFR-10		Enter in TNM	
ADT=	6,558	# Lanes	Speed
Kfactor =	0.060		
DHV=	393	3	
Cars	370	123	40
Medium Trucks	8	3	40
Heavy trucks	16	5	40

AREA 10: I-610 Fulton to Irvington			
TNM Roadway EBML-10		Enter in TNM	
ADT=	123,417	# Lanes	Speed
Kfactor =	0.060		
DHV=	7405	5	
Cars	6961	1392	60
Medium Trucks	148	30	60
Heavy trucks	296	59	60

AREA 10: I-610 Fulton to Irvington			
TNM Roadway EBFR-10		Enter in TNM	
ADT=	3,838	# Lanes	Speed
Kfactor =	0.060		
DHV=	230	2	
Cars	216	108	40
Medium Trucks	5	2	40
Heavy trucks	9	5	40

AREA 11: 45/610 DC I-610 WB to I-45 NB			
TNM Roadway		Enter in TNM	
ADT=	27,644	# Lanes	Speed
Kfactor =	0.060		
DHV=	1659	2	
Cars	1559	780	45
Medium Trucks	33	17	45
Heavy trucks	66	33	45

AREA 11: 45/610 DC WB to SB			
TNM Roadway		Enter in TNM	
ADT=	7,055	# Lanes	Speed
Kfactor =	0.060		
DHV=	423	2	
Cars	398	199	45
Medium Trucks	8	4	45
Heavy trucks	17	8	45

AREA 11: 45/610 DC EB to NB			
TNM Roadway		Enter in TNM	
ADT=	37,458	# Lanes	Speed
Kfactor =	0.060		
DHV=	2247	2	
Cars	2113	1056	45
Medium Trucks	45	22	45
Heavy trucks	90	45	45

AREA 11: 45/610 DC EB to SB			
TNM Roadway		Enter in TNM	
ADT=	8,805	# Lanes	Speed
Kfactor =	0.060		
DHV=	528	2	
Cars	497	248	45
Medium Trucks	11	5	45
Heavy trucks	21	11	45

AREA 11: 45/610 DC NB to WB			
TNM Roadway		Enter in TNM	
ADT=	9,697	# Lanes	Speed
Kfactor =	0.060		
DHV=	582	2	
Cars	547	273	45
Medium Trucks	12	6	45
Heavy trucks	23	12	45

AREA 11: 45/610 DC NB to EB			
TNM Roadway		Enter in TNM	
ADT=	4,508	# Lanes	Speed
Kfactor =	0.060		
DHV=	270	2	
Cars	254	127	45
Medium Trucks	5	3	45
Heavy trucks	11	5	45

AREA 11: 45/610 DC SB to WB			
TNM Roadway		Enter in TNM	
ADT=	29,641	# Lanes	Speed
Kfactor =	0.060		
DHV=	1778	2	
Cars	1672	836	45
Medium Trucks	36	18	45
Heavy trucks	71	36	45

AREA 11: 45/610 DC SB to EB			
TNM Roadway		Enter in TNM	
ADT=	31,241	# Lanes	Speed
Kfactor =	0.060		
DHV=	1874	2	
Cars	1762	881	45
Medium Trucks	37	19	45
Heavy trucks	75	37	45

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

TRAFFIC DATA FOR NOISE MODELING (YEAR 2015)
NHHIP - SEGMENT 3

MAINLANES
DIRECT CONNECTORS
RAMPS
FRONTAGE ROADS
MANAGED LANES

ML & FR	
Growth Rate =	1%
Kfactor =	0.06
%Cars=	0.94
%Medium Trucks=	0.02
%Heavy Trucks=	0.04

	Information needed
	Calculated fields

QA/QC:

Sources of traffic: CDM Smith (for DHV), H-GAC modified regional travel demand model, received 1/29/15 (for ADT)
Source of traffic factors: CDM Smith, raw traffic data for Segment 1 (IH45 south of Gulf Bank Road), received 2/6/15
Existing conditions - speed is posted; Predicted - Speed is design speed (rec'd from Joel S. on 3-6-15)

Assumptions:

1. traffic factors same for all segments
2. averaged daily traffic for smaller sections within each segment
3. ADT not included when DHV was provided by CDM Smith

I-10EB

Start to I-45 NB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	8000	5	
Cars	7520	1504	50
Medium Trucks	160	32	50
Heavy trucks	320	64	50

I-45 NB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1600	1	
Cars	1504	1504	40
Medium Trucks	32	32	40
Heavy trucks	64	64	40

I-10 EB HOV			
TNM Roadway		Enter in TNM	
2014 ADT=	7,119	# Lanes	Speed
2015 ADT=	7,170		
Kfactor =	0.060		
DHV=	430	1	
Cars	404	404	50
Medium Trucks	9	9	50
Heavy trucks	17	17	50

I-45 NB exit to I-45 SB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	6400	4	
Cars	6016	1504	50
Medium Trucks	128	32	50
Heavy trucks	256	64	50

I-45 SB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	2100	1	
Cars	1974	1974	40
Medium Trucks	42	42	40
Heavy trucks	84	84	40

I-10 EB HOV			
TNM Roadway		Enter in TNM	
2014 ADT=	7,119	# Lanes	Speed
2015 ADT=	7,170		
Kfactor =	0.060		
DHV=	430	1	
Cars	404	404	50
Medium Trucks	9	9	50
Heavy trucks	17	17	50

I-45SB exit to Smith exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	4400	3	
Cars	4136	1379	50
Medium Trucks	88	29	50
Heavy trucks	176	59	50

Smith exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1600	2	
Cars	1504	752	40
Medium Trucks	32	16	40
Heavy trucks	64	32	40

I-10 EB HOV			
TNM Roadway		Enter in TNM	
2014 ADT=	7,119	# Lanes	Speed
2015 ADT=	7,170		
Kfactor =	0.060		
DHV=	430	1	
Cars	404	404	50
Medium Trucks	9	9	50
Heavy trucks	17	17	50

Smith exit to I-45 SB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	3900	2	
Cars	3666	1833	50
Medium Trucks	78	39	50
Heavy trucks	156	78	50

I-45 SB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	900	1	
Cars	846	846	40
Medium Trucks	18	18	40
Heavy trucks	36	36	40

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-45 SB entrance to I-45 NB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	4800	3	
Cars	4512	1504	50
Medium Trucks	96	32	50
Heavy trucks	192	64	50

I-45 NB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1600	1	
Cars	1504	1504	40
Medium Trucks	32	32	40
Heavy trucks	64	64	40

I-45 NB entrance to McKee exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	6400	4	
Cars	6016	1504	50
Medium Trucks	128	32	50
Heavy trucks	256	64	50

McKee exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	400	2	
Cars	376	188	40
Medium Trucks	8	4	40
Heavy trucks	16	8	40

McKee exit to San Jacinto entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	6100	3	
Cars	5734	1911	50
Medium Trucks	122	41	50
Heavy trucks	244	81	50

San Jacinto entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1200	1	
Cars	1128	1128	40
Medium Trucks	24	24	40
Heavy trucks	48	48	40

I-10 EBFR			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	14,036		
2015 ADT=	14,137		
Kfactor =	0.060		
DHV=	848	2	
Cars	797	399	35
Medium Trucks	17	8	35
Heavy trucks	34	17	35

San Jacinto entrance to Hamilton/I-69 SB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	7300	4	
Cars	6862	1716	50
Medium Trucks	146	37	50
Heavy trucks	292	73	50

Hamilton/I-69 SB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1200	1	
Cars	1128	1128	40
Medium Trucks	24	24	40
Heavy trucks	48	48	40

I-10 EBFR			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	2,371		
2015 ADT=	2,388		
Kfactor =	0.060		
DHV=	143	2	
Cars	135	67	35
Medium Trucks	3	1	35
Heavy trucks	6	3	35

Hamilton/I-69 SB exit to I-69 NB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	6000	4	
Cars	5640	1410	50
Medium Trucks	120	30	50
Heavy trucks	240	60	50

I-69 NB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1900	2	
Cars	1786	893	40
Medium Trucks	38	19	40
Heavy trucks	76	38	40

I-69 NB exit to I-69 NB/I-69 SB/Chartres entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	4000	3	
Cars	3760	1253	50
Medium Trucks	80	27	50
Heavy trucks	160	53	50

I-69 NB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1600	1	
Cars	1504	1504	40
Medium Trucks	32	32	40
Heavy trucks	64	64	40

I-69 SB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1300	1	
Cars	1222	1222	40
Medium Trucks	26	26	40
Heavy trucks	52	52	40

Chartres entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	747		
2015 ADT=	752		
Kfactor =	0.060		
DHV=	900	1	
Cars	846	846	40
Medium Trucks	18	18	40
Heavy trucks	36	36	40

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-69 NB/I-69 SB/Chartres entrance to End			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	7400	5	
Cars	6956	1391	50
Medium Trucks	148	30	50
Heavy trucks	296	59	50

I-10 EBFR			
TNM Roadway		Enter in TNM	
2014 ADT=	280	# Lanes	Speed
2015 ADT=	282		
Kfactor =	0.060		
DHV=	17	2	
Cars	16	8	35
Medium Trucks	0	0	35
Heavy trucks	1	0	35

I-10WB

Start to I-69 NB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	7100	4	
Cars	6674	1669	50
Medium Trucks	142	36	50
Heavy trucks	284	71	50

I-69 NB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1000	1	
Cars	940	940	40
Medium Trucks	20	20	40
Heavy trucks	40	40	40

I-10WB FR			
TNM Roadway		Enter in TNM	
2014 ADT=	234	# Lanes	Speed
2015 ADT=	236		
Kfactor =	0.060		
DHV=	14	2	
Cars	13	7	35
Medium Trucks	0	0	35
Heavy trucks	1	0	35

I-69 NB exit to I-69 SB/Hamilton exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	6600	4	
Cars	6204	1551	50
Medium Trucks	132	33	50
Heavy trucks	264	66	50

I-69 SB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	2700	2	
Cars	2538	1269	40
Medium Trucks	54	27	40
Heavy trucks	108	54	40

I-10WB FR			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	114	3	
Cars	107	36	35
Medium Trucks	2	1	35
Heavy trucks	5	2	35

I-69 SB/Hamilton exit to I-69 SB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	3900	3	
Cars	3666	1222	50
Medium Trucks	78	26	50
Heavy trucks	156	52	50

I-69 SB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1900	1	
Cars	1786	1786	40
Medium Trucks	38	38	40
Heavy trucks	76	76	40

I-69 SB entrance to I-69 NB/Chartres entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	5800	3	
Cars	5452	1817	50
Medium Trucks	116	39	50
Heavy trucks	232	77	50

I-69 NB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	600	1	
Cars	564	564	40
Medium Trucks	12	12	40
Heavy trucks	24	24	40

Chartres entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1500	1	
Cars	1410	1410	40
Medium Trucks	30	30	40
Heavy trucks	60	60	40

I-10WB FR			
TNM Roadway		Enter in TNM	
2014 ADT=	1,833	# Lanes	Speed
2015 ADT=	1,846		
Kfactor =	0.060		
DHV=	111	2	
Cars	104	52	35
Medium Trucks	2	1	35
Heavy trucks	4	2	35

I-69 NB/Chartres entrance to San Jacinto exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	7100	4	
Cars	6674	1669	50
Medium Trucks	142	36	50
Heavy trucks	284	71	50

San Jacinto exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1100	2	
Cars	1034	517	40
Medium Trucks	22	11	40
Heavy trucks	44	22	40

I-10WB FR			
TNM Roadway		Enter in TNM	
2014 ADT=	1,833	# Lanes	Speed
2015 ADT=	1,846		
Kfactor =	0.060		
DHV=	111	2	
Cars	104	52	35
Medium Trucks	2	1	35
Heavy trucks	4	2	35

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

San Jacinto entrance to McKee entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	6000	3	
Cars	5640	1880	50
Medium Trucks	120	40	50
Heavy trucks	240	80	50

McKee entrance to I-45 SB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	7000	4	
Cars	6580	1645	50
Medium Trucks	140	35	50
Heavy trucks	280	70	50

I-45 SB exit to I-45 NB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	5200	4	
Cars	4888	1222	50
Medium Trucks	104	26	50
Heavy trucks	208	52	50

I-45 NB exit to Louisiana entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	4600	2	
Cars	4324	2162	50
Medium Trucks	92	46	50
Heavy trucks	184	92	50

Louisiana entrance to I-45 NB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	5500	3	
Cars	5170	1723	50
Medium Trucks	110	37	50
Heavy trucks	220	73	50

I-45 NB entrance to I-45 SB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	8600	4	
Cars	8084	2021	50
Medium Trucks	172	43	50
Heavy trucks	344	86	50

I-45 SB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1800	1	
Cars	1692	1692	40
Medium Trucks	36	36	40
Heavy trucks	72	72	40

I-45 NB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	800	2	
Cars	752	376	40
Medium Trucks	16	8	40
Heavy trucks	32	16	40

I-45 NB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	3100	2	
Cars	2914	1457	40
Medium Trucks	62	31	40
Heavy trucks	124	62	40

I-45 SB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1300	2	
Cars	1222	611	40
Medium Trucks	26	13	40
Heavy trucks	52	26	40

McKee entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1000	2	
Cars	940	470	40
Medium Trucks	20	10	40
Heavy trucks	40	20	40

Louisiana entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1700	1	
Cars	1598	1598	40
Medium Trucks	34	34	40
Heavy trucks	68	68	40

I-10WB FR			
TNM Roadway		Enter in TNM	
2014 ADT=	6,827	# Lanes	Speed
2015 ADT=	6,876		
Kfactor =	0.060		
DHV=	413	2	
Cars	388	194	35
Medium Trucks	8	4	35
Heavy trucks	17	8	35

I-10 WB HOV			
TNM Roadway		Enter in TNM	
2014 ADT=	8,555	# Lanes	Speed
2015 ADT=	8,617		
Kfactor =	0.060		
DHV=	517	1	
Cars	486	486	50
Medium Trucks	10	10	50
Heavy trucks	21	21	50

I-10 WB HOV			
TNM Roadway		Enter in TNM	
2014 ADT=	8,555	# Lanes	Speed
2015 ADT=	8,617		
Kfactor =	0.060		
DHV=	517	1	
Cars	486	486	50
Medium Trucks	10	10	50
Heavy trucks	21	21	50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-45 SB entrance to End			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	9700	6	
Cars	9118	1520	50
Medium Trucks	194	32	50
Heavy trucks	388	65	50

I-10 WB HOV			
TNM Roadway		Enter in TNM	
2014 ADT=	8,555	# Lanes	Speed
2015 ADT=	8,617		
Kfactor =	0.060		
DHV=	517	1	
Cars	486	486	50
Medium Trucks	10	10	50
Heavy trucks	21	21	50

I-45SB

Start to Quitman exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	8500	5	
Cars	7990	1598	50
Medium Trucks	170	34	50
Heavy trucks	340	68	50

Quitman exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	300	1	
Cars	282	282	40
Medium Trucks	6	6	40
Heavy trucks	12	12	40

Quitman exit to I-10 WB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	8200	5	
Cars	7708	1542	50
Medium Trucks	164	33	50
Heavy trucks	328	66	50

I-10 WB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1300	1	
Cars	1222	1222	40
Medium Trucks	26	26	40
Heavy trucks	52	52	40

I-45 SB HOV (reversible)			
TNM Roadway		Enter in TNM	
2014 ADT=	9,787	# Lanes	Speed
2015 ADT=	9,857		
Kfactor =	0.060		
DHV=	591	1	
Cars	556	556	50
Medium Trucks	12	12	50
Heavy trucks	24	24	50

I-10 WB exit to Milam/I-10 EB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	6900	4	
Cars	6486	1622	50
Medium Trucks	138	35	50
Heavy trucks	276	69	50

Milam/I-10 EB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1900	2	
Cars	1786	893	40
Medium Trucks	38	19	40
Heavy trucks	76	38	40

I-45 SB HOV (reversible)			
TNM Roadway		Enter in TNM	
2014 ADT=	9,787	# Lanes	Speed
2015 ADT=	9,857		
Kfactor =	0.060		
DHV=	591	1	
Cars	556	556	50
Medium Trucks	12	12	50
Heavy trucks	24	24	50

Milam/I-10 EB exit to I-10 EB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	5000	3	
Cars	4700	1567	50
Medium Trucks	100	33	50
Heavy trucks	200	67	50

I-10 EB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	2100	1	
Cars	1974	1974	40
Medium Trucks	42	42	40
Heavy trucks	84	84	40

I-45 SB HOV (reversible)			
TNM Roadway		Enter in TNM	
2014 ADT=	9,787	# Lanes	Speed
2015 ADT=	9,857		
Kfactor =	0.060		
DHV=	591	1	
Cars	556	556	50
Medium Trucks	12	12	50
Heavy trucks	24	24	50

I-10 EB entrance to I-10 WB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	7100	4	
Cars	6674	1669	50
Medium Trucks	142	36	50
Heavy trucks	284	71	50

I-10 WB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1800	1	
Cars	1692	1692	40
Medium Trucks	36	36	40
Heavy trucks	72	72	40

I-45 SB HOV (reversible)			
TNM Roadway		Enter in TNM	
2014 ADT=	9,787	# Lanes	Speed
2015 ADT=	9,857		
Kfactor =	0.060		
DHV=	591	1	
Cars	556	556	50
Medium Trucks	12	12	50
Heavy trucks	24	24	50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-10 WB entrance to Dallas/Pierce and McKinney exits			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	8900	5	
Cars	8366	1673	50
Medium Trucks	178	36	50
Heavy trucks	356	71	50

McKinney exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1200	2	
Cars	1128	564	40
Medium Trucks	24	12	40
Heavy trucks	48	24	40

Dallas/Pierce exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	2200	2	
Cars	2068	1034	40
Medium Trucks	44	22	40
Heavy trucks	88	44	40

SB Houston			
TNM Roadway		Enter in TNM	
2014 ADT=	12,475	# Lanes	Speed
2015 ADT=	12,565		
Kfactor =	0.060		
DHV=	754	2	
Cars	709	354	35
Medium Trucks	15	8	35
Heavy trucks	30	15	35

Dallas/Pierce and McKinney exits to Memorial entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	4900	3	
Cars	4606	1535	50
Medium Trucks	98	33	50
Heavy trucks	196	65	50

Memorial entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1300	1	
Cars	1222	1222	40
Medium Trucks	26	26	40
Heavy trucks	52	52	40

Heiner			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	2954	3	
Cars	2777	926	35
Medium Trucks	59	20	35
Heavy trucks	118	39	35

Memorial entrance to I-69 NB and SH-288 SB exits			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	6500	3	
Cars	6110	2037	50
Medium Trucks	130	43	50
Heavy trucks	260	87	50

I-69 NB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	100	1	
Cars	94	94	40
Medium Trucks	2	2	40
Heavy trucks	4	4	40

SH-288 SB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	2600	2	
Cars	2444	1222	40
Medium Trucks	52	26	40
Heavy trucks	104	52	40

Heiner			
TNM Roadway		Enter in TNM	
2014 ADT=	14,285	# Lanes	Speed
2015 ADT=	14,388		
Kfactor =	0.060		
DHV=	863	2	
Cars	811	406	35
Medium Trucks	17	9	35
Heavy trucks	35	17	35

I-69 NB and SH-288 SB exits to I-69 SB and SH-288 NB entrances			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	3900	2	
Cars	3666	1833	50
Medium Trucks	78	39	50
Heavy trucks	156	78	50

I-69 SB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1500	1	
Cars	1410	1410	40
Medium Trucks	30	30	40
Heavy trucks	60	60	40

SH-288 NB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	2100	1	
Cars	1974	1974	40
Medium Trucks	42	42	40
Heavy trucks	84	84	40

I-69 SB and SH-288 NB entrances to End			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	7600	4	
Cars	7144	1786	50
Medium Trucks	152	38	50
Heavy trucks	304	76	50

I-45 NB HOV (reversible)			
TNM Roadway		Enter in TNM	
2014 ADT=	11,086	# Lanes	Speed
2015 ADT=	11,166		
Kfactor =	0.060		
DHV=	670	1	
Cars	630	630	50
Medium Trucks	13	13	50
Heavy trucks	27	27	50

I-45NB

Start to I-69 NB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	6800	4	
Cars	6392	1598	50
Medium Trucks	136	34	50
Heavy trucks	272	68	50

I-69 NB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1300	1	
Cars	1222	1222	40
Medium Trucks	26	26	40
Heavy trucks	52	52	40

I-45 NBFR			
TNM Roadway		Enter in TNM	
2014 ADT=	23,145	# Lanes	Speed
2015 ADT=	23,312		
Kfactor =	0.060		
DHV=	1399	3	
Cars	1315	438	35
Medium Trucks	28	9	35
Heavy trucks	56	19	35

I-45 NB HOV (reversible)			
TNM Roadway		Enter in TNM	
2014 ADT=	11,086	# Lanes	Speed
2015 ADT=	11,166		
Kfactor =	0.060		
DHV=	670	1	
Cars	630	630	50
Medium Trucks	13	13	50
Heavy trucks	27	27	50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-69 NB exit to SH-288 SB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	6100	4	
Cars	5734	1434	50
Medium Trucks	122	31	50
Heavy trucks	244	61	50

SH-288 SB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	3400	2	
Cars	3196	1598	40
Medium Trucks	68	34	40
Heavy trucks	136	68	40

SH-288 SB exit to I-69 SB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	2700	2	
Cars	2538	1269	50
Medium Trucks	54	27	50
Heavy trucks	108	54	50

I-69 SB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	100	1	
Cars	94	94	40
Medium Trucks	2	2	40
Heavy trucks	4	4	40

I-69 SB entrance to SH-288 NB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	2700	2	
Cars	2538	1269	50
Medium Trucks	54	27	50
Heavy trucks	108	54	50

SH-288 NB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	2300	1	
Cars	2162	2162	40
Medium Trucks	46	46	40
Heavy trucks	92	92	40

SH-288 NB entrance to Pease/Allen Pkwy/Walker entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	5100	3	
Cars	4794	1598	50
Medium Trucks	102	34	50
Heavy trucks	204	68	50

Walker entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1500	1	
Cars	1410	1410	40
Medium Trucks	30	30	40
Heavy trucks	60	60	40

Pease/Allen Pkwy entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	3000	2	
Cars	2820	1410	40
Medium Trucks	60	30	40
Heavy trucks	120	60	40

Pease/Allen Pkwy/Walker entrance to I-10 EB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	7800	5	
Cars	7332	1466	50
Medium Trucks	156	31	50
Heavy trucks	312	62	50

I-10 EB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1600	1	
Cars	1504	1504	40
Medium Trucks	32	32	40
Heavy trucks	64	64	40

I-10 EB exit to I-10 WB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	6200	4	
Cars	5828	1457	50
Medium Trucks	124	31	50
Heavy trucks	248	62	50

I-10 WB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	3100	2	
Cars	2914	1457	40
Medium Trucks	62	31	40
Heavy trucks	124	62	40

I-45 NB HOV (reversible)			
TNM Roadway		Enter in TNM	
2014 ADT=	9,787	# Lanes	Speed
2015 ADT=	9,857		
Kfactor =	0.060		
DHV=	591	1	
Cars	556	556	50
Medium Trucks	12	12	50
Heavy trucks	24	24	50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-10 WB exit to Travis/I-10 WB entrance				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	3400	3		
Cars	3196	1065		50
Medium Trucks	68	23		50
Heavy trucks	136	45		50

Travis/I-10 WB entrance to I-10 EB entrance				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	4900	4		
Cars	4606	1152		50
Medium Trucks	98	25		50
Heavy trucks	196	49		50

I-10 EB entrance to Quitman entrance				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	6500	5		
Cars	6110	1222		50
Medium Trucks	130	26		50
Heavy trucks	260	52		50

Quitman entrance to End				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	6700	5		
Cars	6298	1260		50
Medium Trucks	134	27		50
Heavy trucks	268	54		50

I-10 WB entrance				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	800	2		
Cars	752	376		40
Medium Trucks	16	8		40
Heavy trucks	32	16		40

I-10 EB entrance				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	1600	1		
Cars	1504	1504		40
Medium Trucks	32	32		40
Heavy trucks	64	64		40

Travis entrance				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	500	1		
Cars	470	470		40
Medium Trucks	10	10		40
Heavy trucks	20	20		40

Quitman entrance				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	400	1		
Cars	376	376		40
Medium Trucks	8	8		40
Heavy trucks	16	16		40

I-45 NB HOV (reversible)				
TNM Roadway		Enter in TNM		
2014 ADT=	9,787	# Lanes	Speed	
2015 ADT=	9,857			
Kfactor =	0.060			
DHV=	591	1		
Cars	556	556		50
Medium Trucks	12	12		50
Heavy trucks	24	24		50

I-45 NB HOV (reversible)				
TNM Roadway		Enter in TNM		
2014 ADT=	9,787	# Lanes	Speed	
2015 ADT=	9,857			
Kfactor =	0.060			
DHV=	591	1		
Cars	556	556		50
Medium Trucks	12	12		50
Heavy trucks	24	24		50

I-45 NB HOV (reversible)				
TNM Roadway		Enter in TNM		
2014 ADT=	9,787	# Lanes	Speed	
2015 ADT=	9,857			
Kfactor =	0.060			
DHV=	591	1		
Cars	556	556		50
Medium Trucks	12	12		50
Heavy trucks	24	24		50

I-45 NB HOV (reversible)				
TNM Roadway		Enter in TNM		
2014 ADT=	9,787	# Lanes	Speed	
2015 ADT=	9,857			
Kfactor =	0.060			
DHV=	591	1		
Cars	556	556		50
Medium Trucks	12	12		50
Heavy trucks	24	24		50

I-69SB

Start to I-10 WB/I-10 EB exit				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	11100	6		
Cars	10434	1739		50
Medium Trucks	222	37		50
Heavy trucks	444	74		50

I-10 WB exit				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	1900	2		
Cars	1786	893		40
Medium Trucks	38	19		40
Heavy trucks	76	38		40

I-10 EB exit				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	1300	1		
Cars	1222	1222		40
Medium Trucks	26	26		40
Heavy trucks	52	52		40

I-69 SBFR				
TNM Roadway		Enter in TNM		
2014 ADT=	1,298	# Lanes	Speed	
2015 ADT=	1,307			
Kfactor =	0.060			
DHV=	833	2		
Cars	783	391		35
Medium Trucks	17	8		35
Heavy trucks	33	17		35

I-69 SB HOV (reversible)				
TNM Roadway		Enter in TNM		
2014 ADT=	2,429	# Lanes	Speed	
2015 ADT=	2,446			
Kfactor =	0.060			
DHV=	147	1		
Cars	138	138		50
Medium Trucks	3	3		50
Heavy trucks	6	6		50

I-10 WB/I-10 EB exit to Lyons entrance				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	7900	4		
Cars	7426	1857		50
Medium Trucks	158	40		50
Heavy trucks	316	79		50

Lyons entrance				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	800	1		
Cars	752	752		40
Medium Trucks	16	16		40
Heavy trucks	32	32		40

I-69 SBFR				
TNM Roadway		Enter in TNM		
2014 ADT=	542	# Lanes	Speed	
2015 ADT=	546			
Kfactor =	0.060			
DHV=	33	3		
Cars	31	10		35
Medium Trucks	1	0		35
Heavy trucks	1	0		35

I-69 SB HOV (reversible)				
TNM Roadway		Enter in TNM		
2014 ADT=	2,429	# Lanes	Speed	
2015 ADT=	2,446			
Kfactor =	0.060			
DHV=	147	1		
Cars	138	138		50
Medium Trucks	3	3		50
Heavy trucks	6	6		50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

Lyons entrance to Jackson exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	8700	5	
Cars	8178	1636	50
Medium Trucks	174	35	50
Heavy trucks	348	70	50

Jackson exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1200	2	
Cars	1128	564	40
Medium Trucks	24	12	40
Heavy trucks	48	24	40

I-69 SB HOV (reversible)			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	2,429		
Kfactor =	0.060		
DHV=	147	1	
Cars	138	138	50
Medium Trucks	3	3	50
Heavy trucks	6	6	50

Jackson exit to I-10 WB/I-10 EB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	7500	3	
Cars	7050	2350	50
Medium Trucks	150	50	50
Heavy trucks	300	100	50

I-10 WB/I-10 EB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	2600	2	
Cars	2444	1222	40
Medium Trucks	52	26	40
Heavy trucks	104	52	40

I-69 SB HOV (reversible)			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	2,446		
Kfactor =	0.060		
DHV=	147	1	
Cars	138	138	50
Medium Trucks	3	3	50
Heavy trucks	6	6	50

I-10 WB/I-10 EB entrance to I-45 NB/I-45 SB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	10100	4	
Cars	9494	2374	50
Medium Trucks	202	51	50
Heavy trucks	404	101	50

I-45 NB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	100	1	
Cars	94	94	40
Medium Trucks	2	2	40
Heavy trucks	4	4	40

I-45 SB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1500	1	
Cars	1410	1410	40
Medium Trucks	30	30	40
Heavy trucks	60	60	40

Hamilton			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	3,695		
Kfactor =	0.060		
DHV=	223	4	
Cars	210	52	35
Medium Trucks	4	1	35
Heavy trucks	9	2	35

I-45 NB/I-45 SB exit to Webster entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	8600	3	
Cars	8084	2695	50
Medium Trucks	172	57	50
Heavy trucks	344	115	50

Webster entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	2200	2	
Cars	2068	1034	40
Medium Trucks	44	22	40
Heavy trucks	88	44	40

Hamilton			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	5,250		
Kfactor =	0.060		
DHV=	317	3	
Cars	298	99	35
Medium Trucks	6	2	35
Heavy trucks	13	4	35

Webster entrance to SH-288 SB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	9900	4	
Cars	9306	2327	50
Medium Trucks	198	50	50
Heavy trucks	396	99	50

SH-288 SB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	3000	2	
Cars	2820	1410	40
Medium Trucks	60	30	40
Heavy trucks	120	60	40

Hamilton			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	5,404		
Kfactor =	0.060		
DHV=	327	2	
Cars	307	153	35
Medium Trucks	7	3	35
Heavy trucks	13	7	35

SH-288 SB exit to SH-288 SB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	7000	2	
Cars	6580	3290	50
Medium Trucks	140	70	50
Heavy trucks	280	140	50

SH-288 SB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	2700	2	
Cars	2538	1269	40
Medium Trucks	54	27	40
Heavy trucks	108	54	40

Hamilton			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	535		
Kfactor =	0.060		
DHV=	32	2	
Cars	30	15	35
Medium Trucks	1	0	35
Heavy trucks	1	1	35

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

SH-288 SB entrance to SH-288 NB entrance				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	9600	3		
Cars	9024	3008		50
Medium Trucks	192	64		50
Heavy trucks	384	128		50

SH-288 NB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1500	1	
Cars	1410	1410	40
Medium Trucks	30	30	40
Heavy trucks	60	60	40

SH-288 NB entrance to Fannin exit				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	11200	4		
Cars	10528	2632		50
Medium Trucks	224	56		50
Heavy trucks	448	112		50

Fannin exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	600	1	
Cars	564	564	40
Medium Trucks	12	12	40
Heavy trucks	24	24	40

Fannin exit to Spur 527 entrance				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	10500	3		
Cars	9870	3290		50
Medium Trucks	210	70		50
Heavy trucks	420	140		50

Spur 527 entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	3800	2	
Cars	3572	1786	40
Medium Trucks	76	38	40
Heavy trucks	152	76	40

Spur 527 entrance to End				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	13200	5		
Cars	12408	2482		50
Medium Trucks	264	53		50
Heavy trucks	528	106		50

I-69 SB HOV (reversible)			
TNM Roadway		Enter in TNM	
2014 ADT=	7,533	# Lanes	Speed
2015 ADT=	7,587		
Kfactor =	0.060		
DHV=	455	1	
Cars	428	428	50
Medium Trucks	9	9	50
Heavy trucks	18	18	50

I-69NB

Start to Spur 527 and Main exits				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	12800	5		
Cars	12032	2406		50
Medium Trucks	256	51		50
Heavy trucks	512	102		50

Main exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	900	3	
Cars	846	282	40
Medium Trucks	18	6	40
Heavy trucks	36	12	40

Spur 527 exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	3500	2	
Cars	3290	1645	40
Medium Trucks	70	35	40
Heavy trucks	140	70	40

I-69 NB HOV (reversible)			
TNM Roadway		Enter in TNM	
2014 ADT=	7,533	# Lanes	Speed
2015 ADT=	7,587		
Kfactor =	0.060		
DHV=	455	1	
Cars	428	428	50
Medium Trucks	9	9	50
Heavy trucks	18	18	50

Spur 527 and Main exits to San Jacinto entrance				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	8500	3		
Cars	7990	2663		50
Medium Trucks	170	57		50
Heavy trucks	340	113		50

San Jacinto entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	900	1	
Cars	846	846	40
Medium Trucks	18	18	40
Heavy trucks	36	36	40

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

San Jacinto entrance to SH-288 SB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	9000	4	
Cars	8460	2115	50
Medium Trucks	180	45	50
Heavy trucks	360	90	50

SH-288 SB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	800	1	
Cars	752	752	40
Medium Trucks	16	16	40
Heavy trucks	32	32	40

SH-288 SB exit to SH-288 NB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	8300	3	
Cars	7802	2601	50
Medium Trucks	166	55	50
Heavy trucks	332	111	50

SH-288 NB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	2400	2	
Cars	2256	1128	40
Medium Trucks	48	24	40
Heavy trucks	96	48	40

SH-288 NB exit to SH-288 NB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	5800	2	
Cars	5452	2726	50
Medium Trucks	116	58	50
Heavy trucks	232	116	50

SH-288 NB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	3500	2	
Cars	3290	1645	40
Medium Trucks	70	35	40
Heavy trucks	140	70	40

Chartres			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	100	2	
Cars	94	47	35
Medium Trucks	2	1	35
Heavy trucks	4	2	35

SH-288 NB entrance to Gray exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	9300	4	
Cars	8742	2186	50
Medium Trucks	186	47	50
Heavy trucks	372	93	50

Gray exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1500	1	
Cars	1410	1410	40
Medium Trucks	30	30	40
Heavy trucks	60	60	40

Chartres			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	5,005		
2015 ADT=	5,041		
Kfactor =	0.060		
DHV=	302	3	
Cars	284	95	35
Medium Trucks	6	2	35
Heavy trucks	12	4	35

Gray exit to McGowen entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	7700	3	
Cars	7238	2413	50
Medium Trucks	154	51	50
Heavy trucks	308	103	50

McGowen entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1100	1	
Cars	1034	1034	40
Medium Trucks	22	22	40
Heavy trucks	44	44	40

Chartres			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	4,971		
2015 ADT=	5,007		
Kfactor =	0.060		
DHV=	300	2	
Cars	282	141	35
Medium Trucks	6	3	35
Heavy trucks	12	6	35

Chartres			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	5,347		
2015 ADT=	5,385		
Kfactor =	0.060		
DHV=	323	3	
Cars	304	101	35
Medium Trucks	6	2	35
Heavy trucks	13	4	35

McGowen entrance to Polk exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	8100	3	
Cars	7614	2538	50
Medium Trucks	162	54	50
Heavy trucks	324	108	50

Polk exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1500	2	
Cars	1410	705	40
Medium Trucks	30	15	40
Heavy trucks	60	30	40

Chartres			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	15,435		
2015 ADT=	15,546		
Kfactor =	0.060		
DHV=	933	4	
Cars	877	219	35
Medium Trucks	19	5	35
Heavy trucks	37	9	35

Chartres			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	12,368		
2015 ADT=	12,457		
Kfactor =	0.060		
DHV=	747	2	
Cars	703	351	35
Medium Trucks	15	7	35
Heavy trucks	30	15	35

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

Polk exit to I-45 NB/I-45 SB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	7400	3	
Cars	6956	2319	50
Medium Trucks	148	49	50
Heavy trucks	296	99	50

I-45 NB/I-45 SB entrance to I-10WB/I-10 EB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	8700	4	
Cars	8178	2045	50
Medium Trucks	174	44	50
Heavy trucks	348	87	50

I-10 WB/I-10 EB exit to Chenevert entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	74,129		
2015 ADT=	74,663		
Kfactor =	0.060		
DHV=	6700	3	
Cars	6298	2099	50
Medium Trucks	134	45	50
Heavy trucks	268	89	50

Chenevert entrance to Lyons exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	8200	5	
Cars	7708	1542	50
Medium Trucks	164	33	50
Heavy trucks	328	66	50

Lyons exit to I-10 WB/I-10 EB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	8000	4	
Cars	7520	1880	50
Medium Trucks	160	40	50
Heavy trucks	320	80	50

I-10 WB/I-10 EB entrance to End			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	10800	6	
Cars	10152	1692	50
Medium Trucks	216	36	50
Heavy trucks	432	72	50

I-45 NB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1300	1	
Cars	1222	1222	40
Medium Trucks	26	26	40
Heavy trucks	52	52	40

I-10 EB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1600	2	
Cars	1504	752	40
Medium Trucks	32	16	40
Heavy trucks	64	32	40

Chenevert entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1500	2	
Cars	1410	705	40
Medium Trucks	30	15	40
Heavy trucks	60	30	40

Lyons Exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	200	1	
Cars	188	188	40
Medium Trucks	4	4	40
Heavy trucks	8	8	40

I-10 EB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1900	2	
Cars	1786	893	40
Medium Trucks	38	19	40
Heavy trucks	76	38	40

I-10 WB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1000	1	
Cars	940	940	40
Medium Trucks	20	20	40
Heavy trucks	40	40	40

I-45 SB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	100	1	
Cars	94	94	40
Medium Trucks	2	2	40
Heavy trucks	4	4	40

I-10 WB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	600	1	
Cars	564	564	40
Medium Trucks	12	12	40
Heavy trucks	24	24	40

Chenevert entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1500	2	
Cars	1410	705	40
Medium Trucks	30	15	40
Heavy trucks	60	30	40

Lyons Exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	200	1	
Cars	188	188	40
Medium Trucks	4	4	40
Heavy trucks	8	8	40

I-10 WB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1000	1	
Cars	940	940	40
Medium Trucks	20	20	40
Heavy trucks	40	40	40

Chartres			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	24,188		
2015 ADT=	24,362		
Kfactor =	0.060		
DHV=	1462	5	
Cars	1374	275	35
Medium Trucks	29	6	35
Heavy trucks	58	12	35

Chartres			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	8,122		
2015 ADT=	8,180		
Kfactor =	0.060		
DHV=	491	2	
Cars	461	231	35
Medium Trucks	10	5	35
Heavy trucks	20	10	35

Chenevert entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	1500	2	
Cars	1410	705	40
Medium Trucks	30	15	40
Heavy trucks	60	30	40

Lyons Exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	200	1	
Cars	188	188	40
Medium Trucks	4	4	40
Heavy trucks	8	8	40

I-69 NBFR			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	1,353		
2015 ADT=	1,363		
Kfactor =	0.060		
DHV=	82	2	
Cars	77	38	35
Medium Trucks	2	1	35
Heavy trucks	3	2	35

I-69 NBFR			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	1,353		
2015 ADT=	1,363		
Kfactor =	0.060		
DHV=	82	2	
Cars	77	38	35
Medium Trucks	2	1	35
Heavy trucks	3	2	35

Chartres			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	20,380		
2015 ADT=	20,527		
Kfactor =	0.060		
DHV=	1232	4	
Cars	1158	289	35
Medium Trucks	25	6	35
Heavy trucks	49	12	35

Chartres			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	8,122		
2015 ADT=	8,180		
Kfactor =	0.060		
DHV=	491	2	
Cars	461	231	35
Medium Trucks	10	5	35
Heavy trucks	20	10	35

I-69 NB HOV (reversible)			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	2,429		
2015 ADT=	2,446		
Kfactor =	0.060		
DHV=	147	1	
Cars	138	138	50
Medium Trucks	3	3	50
Heavy trucks	6	6	50

I-69 NB HOV (reversible)			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	2,429		
2015 ADT=	2,446		
Kfactor =	0.060		
DHV=	147	1	
Cars	138	138	50
Medium Trucks	3	3	50
Heavy trucks	6	6	50

I-69 NB HOV (reversible)			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	2,429		
2015 ADT=	2,446		
Kfactor =	0.060		
DHV=	147	1	
Cars	138	138	50
Medium Trucks	3	3	50
Heavy trucks	6	6	50

I-69 NB HOV (reversible)			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	2,429		
2015 ADT=	2,446		
Kfactor =	0.060		
DHV=	147	1	
Cars	138	138	50
Medium Trucks	3	3	50
Heavy trucks	6	6	50

SH-288SB

I-45 NB/I-45 SB entrance to I-69 SB exit				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	6000	4		
Cars	5640	1410		50
Medium Trucks	120	30		50
Heavy trucks	240	60		50

I-69 SB exit				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	2700	2		
Cars	2538	1269		40
Medium Trucks	54	27		40
Heavy trucks	108	54		40

I-69 SB exit to Jackson entrance				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	3300	2		
Cars	3102	1551		50
Medium Trucks	66	33		50
Heavy trucks	132	66		50

Jackson entrance				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	300	1		
Cars	282	282		40
Medium Trucks	6	6		40
Heavy trucks	12	12		40

Jackson entrance to I-69 SB and I-69 NB/Hamilton/Berry entrances				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	3400	2		
Cars	3196	1598		50
Medium Trucks	68	34		50
Heavy trucks	136	68		50

I-69 SB entrance				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	3000	2		
Cars	2820	1410		40
Medium Trucks	60	30		40
Heavy trucks	120	60		40

I-69 NB entrance				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	800	1		
Cars	752	752		40
Medium Trucks	16	16		40
Heavy trucks	32	32		40

Hamilton entrance				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	2,179			
2015 ADT=	2,195			
Kfactor =	0.060			
DHV=	700	1		
Cars	658	658		40
Medium Trucks	14	14		40
Heavy trucks	28	28		40

I-69 SB and I-69 NB/Hamilton/Berry entrances to End				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	7500	4		
Cars	7050	1763		50
Medium Trucks	150	38		50
Heavy trucks	300	75		50

SH-288NB

Start to I-69 SB exit				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	7800	4		
Cars	7332	1833		50
Medium Trucks	156	39		50
Heavy trucks	312	78		50

I-69 SB exit				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	1500	1		
Cars	1410	1410		40
Medium Trucks	30	30		40
Heavy trucks	60	60		40

I-69 SB exit to I-69 NB/Chartres exit				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	6300	4		
Cars	5922	1481		50
Medium Trucks	126	32		50
Heavy trucks	252	63		50

I-69 NB exit				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
2015 ADT=	0			
Kfactor =	0.060			
DHV=	3600	2		
Cars	3384	1692		40
Medium Trucks	72	36		40
Heavy trucks	144	72		40

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-69 SB/Chartres exit to Chenevert exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	2600	2	
Cars	2444	1222	50
Medium Trucks	52	26	50
Heavy trucks	104	52	50

Chenevert exit to I-69 NB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	2000	3	
Cars	1880	627	50
Medium Trucks	40	13	50
Heavy trucks	80	27	50

I-69 NB entrance to I-45 NB/I-45 SB exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	4500	4	
Cars	4230	1058	50
Medium Trucks	90	23	50
Heavy trucks	180	45	50

I-69 NB entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	2400	2	
Cars	2256	1128	40
Medium Trucks	48	24	40
Heavy trucks	96	48	40

Chenevert exit			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
2015 ADT=	0		
Kfactor =	0.060		
DHV=	600	2	
Cars	564	282	40
Medium Trucks	12	6	40
Heavy trucks	24	12	40

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

TRAFFIC DATA FOR NOISE MODELING (YEAR 2035)
NHHIP - SEGMENT 3 (Alternative 10)

MAINLANES
DIRECT CONNECTORS
RAMPS
FRONTAGE ROADS
MANAGED LANES

ML & FR	
Growth Rate =	1%
Kfactor =	0.06
%Cars=	0.94
%Medium Trucks=	0.02
%Heavy Trucks=	0.04

	Information needed
	Calculated fields

QA/QC:

Source of traffic: CDM Smith, H-GAC modified regional travel demand model, received 1/29/15

Source of traffic factors: CDM Smith, raw traffic data for Segment 1 (IH45 south of Gulf Bank Road), received 2/6/15

Existing conditions - speed is posted; Predicted - Speed is design speed (rec'd from Joel S. on 3-6-15)

Assumptions:

1. traffic factors same for all segments
2. averaged daily traffic for smaller sections within each segment
3. ADT not included when DHV was provided by CDM Smith

I-10EB

Start to I-45 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	9300	5	
Cars	8742	1748	50
Medium Trucks	186	37	50
Heavy trucks	372	74	50

I-45 NB exit to I-45 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	8500	4	
Cars	7990	1998	50
Medium Trucks	170	43	50
Heavy trucks	340	85	50

I-45 SB exit to Smith exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	5200	3	
Cars	4888	1629	50
Medium Trucks	104	35	50
Heavy trucks	208	69	50

Smith exit to I-45 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4300	3	
Cars	4042	1347	50
Medium Trucks	86	29	50
Heavy trucks	172	57	50

I-45 SB entrance to I-45 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	5200	3	
Cars	4888	1629	50
Medium Trucks	104	35	50
Heavy trucks	208	69	50

I-45 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	800	1	
Cars	752	752	40
Medium Trucks	16	16	40
Heavy trucks	32	32	40

I-45 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3300	2	
Cars	3102	1551	40
Medium Trucks	66	33	40
Heavy trucks	132	66	40

Smith exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3300	1	
Cars	3102	3102	40
Medium Trucks	66	66	40
Heavy trucks	132	132	40

I-45 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	900	1	
Cars	846	846	40
Medium Trucks	18	18	40
Heavy trucks	36	36	40

I-45 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1800	2	
Cars	1692	846	40
Medium Trucks	36	18	40
Heavy trucks	72	36	40

I-10 EB HOV		
TNM Roadway		Enter in TNM
ADT=		# Lanes Speed
Kfactor =	0.060	
DHV=	1700	1
Cars	1598	1598 50
Medium Trucks	34	34 50
Heavy trucks	68	68 50

I-10 EB HOV		
TNM Roadway		Enter in TNM
ADT=		# Lanes Speed
Kfactor =	0.060	
DHV=	1700	2
Cars	1598	799 50
Medium Trucks	34	17 50
Heavy trucks	68	34 50

I-10 EB HOV		
TNM Roadway		Enter in TNM
ADT=		# Lanes Speed
Kfactor =	0.060	
DHV=	1700	2
Cars	1598	799 50
Medium Trucks	34	17 50
Heavy trucks	68	34 50

I-10 EB HOV		
TNM Roadway		Enter in TNM
ADT=		# Lanes Speed
Kfactor =	0.060	
DHV=	1100	2
Cars	1034	517 50
Medium Trucks	22	11 50
Heavy trucks	44	22 50

I-10 EB HOV		
TNM Roadway		Enter in TNM
ADT=		# Lanes Speed
Kfactor =	0.060	
DHV=	1100	2
Cars	1034	517 50
Medium Trucks	22	11 50
Heavy trucks	44	22 50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-45 NB entrance to McKee exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7000	5	
Cars	6580	1316	50
Medium Trucks	140	28	50
Heavy trucks	280	56	50

McKee exit to San Jacinto entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	6600	4	
Cars	6204	1551	50
Medium Trucks	132	33	50
Heavy trucks	264	66	50

San Jacinto entrance to Hamilton/I-69 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7500	5	
Cars	7050	1410	50
Medium Trucks	150	30	50
Heavy trucks	300	60	50

Hamilton/I-69 SB exit to Jensen exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	6500	4	
Cars	6110	1528	50
Medium Trucks	130	33	50
Heavy trucks	260	65	50

Jensen exit to I-69 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	6200	4	
Cars	5828	1457	50
Medium Trucks	124	31	50
Heavy trucks	248	62	50

I-69 NB exit to I-69 NB/Chartres entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3400	2	
Cars	3196	1598	50
Medium Trucks	68	34	50
Heavy trucks	136	68	50

I-69 NB/Chartres entrance to I-69 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7100	3	
Cars	6674	2225	50
Medium Trucks	142	47	50
Heavy trucks	284	95	50

Hamilton/I-69 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	1	
Cars	1034	1034	40
Medium Trucks	22	22	40
Heavy trucks	44	44	40

I-69 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2800	2	
Cars	2632	1316	40
Medium Trucks	56	28	40
Heavy trucks	112	56	40

I-69 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2000	1	
Cars	1880	1880	40
Medium Trucks	40	40	40
Heavy trucks	80	80	40

I-69 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1300	1	
Cars	1222	1222	40
Medium Trucks	26	26	40
Heavy trucks	52	52	40

McKee exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	500	1	
Cars	470	470	40
Medium Trucks	10	10	40
Heavy trucks	20	20	40

San Jacinto entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.940		
DHV=	900	1	
Cars	846	846	40
Medium Trucks	18	18	40
Heavy trucks	36	36	40

Jensen exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	300	2	
Cars	282	141	40
Medium Trucks	6	3	40
Heavy trucks	12	6	40

Chartres entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1700	1	
Cars	1598	1598	40
Medium Trucks	34	34	40
Heavy trucks	68	68	40

I-10 EBFR			
TNM Roadway		Enter in TNM	
ADT=	4,679	# Lanes	Speed
Kfactor =	0.060		
DHV=	281	2	
Cars	264	132	35
Medium Trucks	6	3	35
Heavy trucks	11	6	35

I-10 EBFR			
TNM Roadway		Enter in TNM	
ADT=	4,679	# Lanes	Speed
Kfactor =	0.060		
DHV=	281	2	
Cars	264	132	35
Medium Trucks	6	3	35
Heavy trucks	11	6	35

I-10 EBFR			
TNM Roadway		Enter in TNM	
ADT=	4,679	# Lanes	Speed
Kfactor =	0.060		
DHV=	281	2	
Cars	264	132	35
Medium Trucks	6	3	35
Heavy trucks	11	6	35

I-10 EBFR			
TNM Roadway		Enter in TNM	
ADT=	4,679	# Lanes	Speed
Kfactor =	0.060		
DHV=	281	2	
Cars	264	132	35
Medium Trucks	6	3	35
Heavy trucks	11	6	35

I-10 EBFR			
TNM Roadway		Enter in TNM	
ADT=	2,883	# Lanes	Speed
Kfactor =	0.060		
DHV=	173	2	
Cars	163	81	35
Medium Trucks	3	2	35
Heavy trucks	7	3	35

I-10 EB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	2	
Cars	1034	517	50
Medium Trucks	22	11	50
Heavy trucks	44	22	50

I-10 EB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	2	
Cars	1034	517	50
Medium Trucks	22	11	50
Heavy trucks	44	22	50

I-10 EB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	2	
Cars	1034	517	50
Medium Trucks	22	11	50
Heavy trucks	44	22	50

I-10 EB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	2	
Cars	1034	517	50
Medium Trucks	22	11	50
Heavy trucks	44	22	50

I-10 EB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	2	
Cars	1034	517	50
Medium Trucks	22	11	50
Heavy trucks	44	22	50

I-10 EB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	2	
Cars	1034	517	50
Medium Trucks	22	11	50
Heavy trucks	44	22	50

I-10 EB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	2	
Cars	1034	517	50
Medium Trucks	22	11	50
Heavy trucks	44	22	50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-69 SB entrance to I-10 EB HOV entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8100	4		
Cars	7614	1904		50
Medium Trucks	162	41		50
Heavy trucks	324	81		50

I-10 EB HOV entrance to Waco exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8700	5		
Cars	8178	1636		50
Medium Trucks	174	35		50
Heavy trucks	348	70		50

Waco exit to End				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8600	4		
Cars	8084	2021		50
Medium Trucks	172	43		50
Heavy trucks	344	86		50

I-10 EB HOV entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1100	1		
Cars	1034	1034		40
Medium Trucks	22	22		40
Heavy trucks	44	44		40

Waco exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	100	1		
Cars	94	94		40
Medium Trucks	2	2		40
Heavy trucks	4	4		40

I-10 EBFR				
TNM Roadway		Enter in TNM		
ADT=	2,883	# Lanes	Speed	
Kfactor =	0.060			
DHV=	173	2		
Cars	163	81		35
Medium Trucks	3	2		35
Heavy trucks	7	3		35

I-10 EB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1100	2		
Cars	1034	517		50
Medium Trucks	22	11		50
Heavy trucks	44	22		50

I-10 EBFR				
TNM Roadway		Enter in TNM		
ADT=	2,883	# Lanes	Speed	
Kfactor =	0.060			
DHV=	173	2		
Cars	163	81		35
Medium Trucks	3	2		35
Heavy trucks	7	3		35

I-10 EBFR				
TNM Roadway		Enter in TNM		
ADT=	2,883	# Lanes	Speed	
Kfactor =	0.060			
DHV=	173	1		
Cars	163	163		35
Medium Trucks	3	3		35
Heavy trucks	7	7		35

I-10WB

Start to Waco entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8700	4		
Cars	8178	2045		50
Medium Trucks	174	44		50
Heavy trucks	348	87		50

Waco entrance to I-10 WB HOV exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8000	5		
Cars	7520	1504		50
Medium Trucks	160	32		50
Heavy trucks	320	64		50

I-10 WB HOV exit to Gregg exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8000	5		
Cars	7520	1504		50
Medium Trucks	160	32		50
Heavy trucks	320	64		50

Gregg exit to I-69 NB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	7900	4		
Cars	7426	1857		50
Medium Trucks	158	40		50
Heavy trucks	316	79		50

I-10 WB HOV exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	800	1		
Cars	752	752		40
Medium Trucks	16	16		40
Heavy trucks	32	32		40

I-69 NB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	900	1		
Cars	846	846		40
Medium Trucks	18	18		40
Heavy trucks	36	36		40

Waco entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	100	1		
Cars	94	94		40
Medium Trucks	2	2		40
Heavy trucks	4	4		40

Gregg exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	100	1		
Cars	94	94		40
Medium Trucks	2	2		40
Heavy trucks	4	4		40

I-10WB FR				
TNM Roadway		Enter in TNM		
ADT=	838	# Lanes	Speed	
Kfactor =	0.060			
DHV=	50	2		
Cars	47	24		35
Medium Trucks	1	1		35
Heavy trucks	2	1		35

I-10WB FR				
TNM Roadway		Enter in TNM		
ADT=	838	# Lanes	Speed	
Kfactor =	0.060			
DHV=	150	3		
Cars	141	47		35
Medium Trucks	3	1		35
Heavy trucks	6	2		35

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	800	1		
Cars	752	752		50
Medium Trucks	16	16		50
Heavy trucks	32	32		50

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	800	1		
Cars	752	752		50
Medium Trucks	16	16		50
Heavy trucks	32	32		50

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	800	2		
Cars	752	376		50
Medium Trucks	16	8		50
Heavy trucks	32	16		50

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	800	2		
Cars	752	376		50
Medium Trucks	16	8		50
Heavy trucks	32	16		50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-69 NB exit to I-69 SB/Hamilton exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7500	4	
Cars	7050	1763	50
Medium Trucks	150	38	50
Heavy trucks	300	75	50

I-69 SB/Hamilton exit to McKee exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4900	2	
Cars	4606	2303	50
Medium Trucks	98	49	50
Heavy trucks	196	98	50

McKee exit to I-69 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4500	2	
Cars	4230	2115	50
Medium Trucks	90	45	50
Heavy trucks	180	90	50

I-69 SB entrance to I-69 NB/Chartres entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	6500	3	
Cars	6110	2037	50
Medium Trucks	130	43	50
Heavy trucks	260	87	50

I-69 NB/Chartres entrance to McKee entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7700	4	
Cars	7238	1810	50
Medium Trucks	154	39	50
Heavy trucks	308	77	50

McKee entrance to I-45 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	9500	4	
Cars	8930	2233	50
Medium Trucks	190	48	50
Heavy trucks	380	95	50

I-45 SB exit to I-45 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7500	3	
Cars	7050	2350	50
Medium Trucks	150	50	50
Heavy trucks	300	100	50

I-69 SB/Hamilton exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2600	2	
Cars	2444	1222	40
Medium Trucks	52	26	40
Heavy trucks	104	52	40

I-69 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2000	1	
Cars	1880	1880	40
Medium Trucks	40	40	40
Heavy trucks	80	80	40

I-69 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	200	1	
Cars	188	188	40
Medium Trucks	4	4	40
Heavy trucks	8	8	40

I-45 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2000	1	
Cars	1880	1880	40
Medium Trucks	40	40	40
Heavy trucks	80	80	40

I-45 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1200	1	
Cars	1128	1128	40
Medium Trucks	24	24	40
Heavy trucks	48	48	40

Elysian exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	400	1	
Cars	376	376	40
Medium Trucks	8	8	40
Heavy trucks	16	16	40

Chartres entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1900	1	
Cars	1786	1786	40
Medium Trucks	38	38	40
Heavy trucks	76	76	40

McKee entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1800	1	
Cars	1692	1692	40
Medium Trucks	36	36	40
Heavy trucks	72	72	40

I-10WB FR			
TNM Roadway		Enter in TNM	
ADT=	838	# Lanes	Speed
Kfactor =	0.060		
DHV=	150	2	
Cars	141	71	35
Medium Trucks	3	2	35
Heavy trucks	6	3	35

I-10 WBFR			
TNM Roadway		Enter in TNM	
ADT=	3,183	# Lanes	Speed
Kfactor =	0.060		
DHV=	191	2	
Cars	180	90	35
Medium Trucks	4	2	35
Heavy trucks	8	4	35

I-10 WBFR			
TNM Roadway		Enter in TNM	
ADT=	3,183	# Lanes	Speed
Kfactor =	0.060		
DHV=	591	2	
Cars	556	278	35
Medium Trucks	12	6	35
Heavy trucks	24	12	35

I-10 WBFR			
TNM Roadway		Enter in TNM	
ADT=	3,183	# Lanes	Speed
Kfactor =	0.060		
DHV=	691	3	
Cars	650	217	35
Medium Trucks	14	5	35
Heavy trucks	28	9	35

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	800	2	
Cars	752	376	50
Medium Trucks	16	8	50
Heavy trucks	32	16	50

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	800	2	
Cars	752	376	50
Medium Trucks	16	8	50
Heavy trucks	32	16	50

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	800	2	
Cars	752	376	50
Medium Trucks	16	8	50
Heavy trucks	32	16	50

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	800	2	
Cars	752	376	50
Medium Trucks	16	8	50
Heavy trucks	32	16	50

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	800	2	
Cars	752	376	50
Medium Trucks	16	8	50
Heavy trucks	32	16	50

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	800	2	
Cars	752	376	50
Medium Trucks	16	8	50
Heavy trucks	32	16	50

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	800	2	
Cars	752	376	50
Medium Trucks	16	8	50
Heavy trucks	32	16	50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-45 NB exit to Louisiana entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	6500	2		
Cars	6110	3055		50
Medium Trucks	130	65		50
Heavy trucks	260	130		50

Louisiana entrance to I-45 NB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8300	3		
Cars	7802	2601		50
Medium Trucks	166	55		50
Heavy trucks	332	111		50

I-45 NB entrance to I-45 SB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	13000	5		
Cars	12220	2444		50
Medium Trucks	260	52		50
Heavy trucks	520	104		50

I-45 SB entrance to End				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	14100	6		
Cars	13254	2209		50
Medium Trucks	282	47		50
Heavy trucks	564	94		50

I-45SB

Start to Quitman exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	9700	5		
Cars	9118	1824		50
Medium Trucks	194	39		50
Heavy trucks	388	78		50

Quitman exit to I-10 WB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	9300	5		
Cars	8742	1748		50
Medium Trucks	186	37		50
Heavy trucks	372	74		50

I-10 WB exit to I-45 SB HOV entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8100	4		
Cars	7614	1904		50
Medium Trucks	162	41		50
Heavy trucks	324	81		50

I-45 NB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	5300	2		
Cars	4982	2491		40
Medium Trucks	106	53		40
Heavy trucks	212	106		40

I-45 SB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1200	1		
Cars	1128	1128		40
Medium Trucks	24	24		40
Heavy trucks	48	48		40

I-10 WB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1200	1		
Cars	1128	1128		40
Medium Trucks	24	24		40
Heavy trucks	48	48		40

I-45 SB HOV entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1700	1		
Cars	1598	1598		40
Medium Trucks	34	34		40
Heavy trucks	68	68		40

Louisiana entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2800	1		
Cars	2632	2632		40
Medium Trucks	56	56		40
Heavy trucks	112	112		40

Quitman exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	500	1		
Cars	470	470		40
Medium Trucks	10	10		40
Heavy trucks	20	20		40

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	800	2		
Cars	752	376		50
Medium Trucks	16	8		50
Heavy trucks	32	16		50

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1300	2		
Cars	1222	611		50
Medium Trucks	26	13		50
Heavy trucks	52	26		50

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1300	2		
Cars	1222	611		50
Medium Trucks	26	13		50
Heavy trucks	52	26		50

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1300	1		
Cars	1222	1222		50
Medium Trucks	26	26		50
Heavy trucks	52	52		50

I-45 SB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2700	2		
Cars	2538	1269		50
Medium Trucks	54	27		50
Heavy trucks	108	54		50

I-45 SB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2700	2		
Cars	2538	1269		50
Medium Trucks	54	27		50
Heavy trucks	108	54		50

I-45 SB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2700	2		
Cars	2538	1269		50
Medium Trucks	54	27		50
Heavy trucks	108	54		50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-45 SB HOV entrance to Milam/I-10 EB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	9700	4	
Cars	9118	2280	50
Medium Trucks	194	49	50
Heavy trucks	388	97	50

Milam/I-10 EB exit to I-10 EB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7900	3	
Cars	7426	2475	50
Medium Trucks	158	53	50
Heavy trucks	316	105	50

I-10 EB entrance to I-10 WB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	11000	5	
Cars	10340	2068	50
Medium Trucks	220	44	50
Heavy trucks	440	88	50

I-10 WB entrance to Heiner/McKinney exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	13000	6	
Cars	12220	2037	50
Medium Trucks	260	43	50
Heavy trucks	520	87	50

Heiner/McKinney exit to Allen Pkwy exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	8200	4	
Cars	7708	1927	50
Medium Trucks	164	41	50
Heavy trucks	328	82	50

Allen Pkwy exit to Allen Pkwy entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7400	3	
Cars	6956	2319	50
Medium Trucks	148	49	50
Heavy trucks	296	99	50

Allen Pkwy entrance to I-69 NB and SH-288 SB exits			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	8600	4	
Cars	8084	2021	50
Medium Trucks	172	43	50
Heavy trucks	344	86	50

I-10 EB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	900	1	
Cars	846	846	40
Medium Trucks	18	18	40
Heavy trucks	36	36	40

I-10 EB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3300	2	
Cars	3102	1551	40
Medium Trucks	66	33	40
Heavy trucks	132	66	40

I-10 WB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2000	1	
Cars	1880	1880	40
Medium Trucks	40	40	40
Heavy trucks	80	80	40

McKinney exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1900	1	
Cars	1786	1786	40
Medium Trucks	38	38	40
Heavy trucks	76	76	40

Milam exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	1	
Cars	1034	1034	40
Medium Trucks	22	22	40
Heavy trucks	44	44	40

Memorial to Heiner			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	130	2	
Cars	123	61	35
Medium Trucks	3	1	35
Heavy trucks	5	3	35

Heiner exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3000	1	
Cars	2820	2820	40
Medium Trucks	60	60	40
Heavy trucks	120	120	40

Allen Pkwy exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	700	1	
Cars	658	658	40
Medium Trucks	14	14	40
Heavy trucks	28	28	40

Allen Pkwy entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1900	1	
Cars	1786	1786	40
Medium Trucks	38	38	40
Heavy trucks	76	76	40

SH-288 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3600	2	
Cars	3384	1692	40
Medium Trucks	72	36	40
Heavy trucks	144	72	40

I-45 SB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1000	2	
Cars	940	470	50
Medium Trucks	20	10	50
Heavy trucks	40	20	50

I-45 SB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1000	2	
Cars	940	470	50
Medium Trucks	20	10	50
Heavy trucks	40	20	50

I-45 SB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1000	2	
Cars	940	470	50
Medium Trucks	20	10	50
Heavy trucks	40	20	50

SB Houston			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	710	2	
Cars	668	334	35
Medium Trucks	14	7	35
Heavy trucks	28	14	35

Heiner			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	841	3	
Cars	790	263	35
Medium Trucks	17	6	35
Heavy trucks	34	11	35

Heiner			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3841	3	
Cars	3610	1203	35
Medium Trucks	77	26	35
Heavy trucks	154	51	35

Heiner			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3841	3	
Cars	3611	1204	35
Medium Trucks	77	26	35
Heavy trucks	154	51	35

I-69 NB and SH-288 SB exits to SH-288 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	5000	3	
Cars	4700	1567	50
Medium Trucks	100	33	50
Heavy trucks	200	67	50

SH-288 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2300	2	
Cars	2162	1081	40
Medium Trucks	46	23	40
Heavy trucks	92	46	40

SH-288 NB entrance to I-69 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7300	4	
Cars	6862	1716	50
Medium Trucks	146	37	50
Heavy trucks	292	73	50

I-69 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1700	2	
Cars	1598	799	40
Medium Trucks	34	17	40
Heavy trucks	68	34	40

I-69 SB entrance to End			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	9000	4	
Cars	8460	2115	50
Medium Trucks	180	45	50
Heavy trucks	360	90	50

I-45 SB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=	13,380	# Lanes	Speed
Kfactor =	0.060		
DHV=	803	1	
Cars	755	755	50
Medium Trucks	16	16	50
Heavy trucks	32	32	50

I-45NB

Start to I-69 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7500	4	
Cars	7050	1763	50
Medium Trucks	150	38	50
Heavy trucks	300	75	50

I-69 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	900	1	
Cars	846	846	40
Medium Trucks	18	18	40
Heavy trucks	36	36	40

I-45 NBFR			
TNM Roadway		Enter in TNM	
ADT=	26,710	# Lanes	Speed
Kfactor =	0.060		
DHV=	1603	3	
Cars	1506	502	35
Medium Trucks	32	11	35
Heavy trucks	64	21	35

I-45 NB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=	13,380	# Lanes	Speed
Kfactor =	0.060		
DHV=	803	1	
Cars	755	755	50
Medium Trucks	16	16	50
Heavy trucks	32	32	50

I-69 NB exit to SH-288 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	6600	4	
Cars	6204	1551	50
Medium Trucks	132	33	50
Heavy trucks	264	66	50

SH-288 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3500	2	
Cars	3290	1645	40
Medium Trucks	70	35	40
Heavy trucks	140	70	40

SH-288 SB exit to I-69 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3500	3	
Cars	3290	1097	50
Medium Trucks	70	23	50
Heavy trucks	140	47	50

I-69 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	100	1	
Cars	94	94	40
Medium Trucks	2	2	40
Heavy trucks	4	4	40

I-69 SB entrance to SH-288 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3600	3	
Cars	3384	1128	50
Medium Trucks	72	24	50
Heavy trucks	144	48	50

SH-288 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4600	2	
Cars	4324	2162	40
Medium Trucks	92	46	40
Heavy trucks	184	92	40

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

SH-288 NB entrance to Dallas exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	8200	5	
Cars	7708	1542	50
Medium Trucks	164	33	50
Heavy trucks	328	66	50

Dallas exit to Houston exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7800	4	
Cars	7332	1833	50
Medium Trucks	156	39	50
Heavy trucks	312	78	50

Houston exit to Pease entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7000	3	
Cars	6580	2193	50
Medium Trucks	140	47	50
Heavy trucks	280	93	50

Pease entrance to Allen Pkwy/Walker entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	8200	4	
Cars	7708	1927	50
Medium Trucks	164	41	50
Heavy trucks	328	82	50

Allen Pkwy/Walker entrance to I-10 EB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	11100	6	
Cars	10434	1739	50
Medium Trucks	222	37	50
Heavy trucks	444	74	50

I-10 EB exit to I-10 WB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	9300	5	
Cars	8742	1748	50
Medium Trucks	186	37	50
Heavy trucks	372	74	50

I-10 WB exit to I-10 WB/Louisiana entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4400	3	
Cars	4136	1379	50
Medium Trucks	88	29	50
Heavy trucks	176	59	50

Dallas exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	400	1	
Cars	376	376	40
Medium Trucks	8	8	40
Heavy trucks	16	16	40

Houston exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1400	1	
Cars	1316	1316	40
Medium Trucks	28	28	40
Heavy trucks	56	56	40

Pease entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2100	1	
Cars	1974	1974	40
Medium Trucks	42	42	40
Heavy trucks	84	84	40

Allen Pkwy entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	1	
Cars	1034	1034	40
Medium Trucks	22	22	40
Heavy trucks	44	44	40

I-10 EB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1800	2	
Cars	1692	846	40
Medium Trucks	36	18	40
Heavy trucks	72	36	40

I-10 WB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	5300	2	
Cars	4982	2491	40
Medium Trucks	106	53	40
Heavy trucks	212	106	40

I-10 WB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1200	1	
Cars	1128	1128	40
Medium Trucks	24	24	40
Heavy trucks	48	48	40

Dallas exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	400	1	
Cars	376	376	40
Medium Trucks	8	8	40
Heavy trucks	16	16	40

Houston exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1400	1	
Cars	1316	1316	40
Medium Trucks	28	28	40
Heavy trucks	56	56	40

Pease entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2100	1	
Cars	1974	1974	40
Medium Trucks	42	42	40
Heavy trucks	84	84	40

Walker entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2000	1	
Cars	1880	1880	40
Medium Trucks	40	40	40
Heavy trucks	80	80	40

I-10 WB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	5300	2	
Cars	4982	2491	40
Medium Trucks	106	53	40
Heavy trucks	212	106	40

I-10 WB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	5300	2	
Cars	4982	2491	40
Medium Trucks	106	53	40
Heavy trucks	212	106	40

Louisiana entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	500	1	
Cars	470	470	40
Medium Trucks	10	10	40
Heavy trucks	20	20	40

Pease			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	985	2	
Cars	926	463	35
Medium Trucks	20	10	35
Heavy trucks	39	20	35

Pease			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1213	2	
Cars	1140	570	35
Medium Trucks	24	12	35
Heavy trucks	49	24	35

NB Houston to Memorial			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	130	1	
Cars	123	123	35
Medium Trucks	3	3	35
Heavy trucks	5	5	35

Pease			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	985	2	
Cars	926	463	35
Medium Trucks	20	10	35
Heavy trucks	39	20	35

Pease to NB Houston			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	559	1	
Cars	525	525	35
Medium Trucks	11	11	35
Heavy trucks	22	22	35

NB Houston to Memorial			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	130	1	
Cars	123	123	35
Medium Trucks	3	3	35
Heavy trucks	5	5	35

I-45 NB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2700	2	
Cars	2538	1269	50
Medium Trucks	54	27	50
Heavy trucks	108	54	50

I-45 NB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2700	2	
Cars	2538	1269	50
Medium Trucks	54	27	50
Heavy trucks	108	54	50

I-45 NB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2700	2	
Cars	2538	1269	50
Medium Trucks	54	27	50
Heavy trucks	108	54	50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-10 WB/Louisiana entrance to I-10 EB/Travis entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	5800	5		
Cars	5452	1090		50
Medium Trucks	116	23		50
Heavy trucks	232	46		50

I-10 EB/Travis entrance to End				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	7000	6		
Cars	6580	1097		50
Medium Trucks	140	23		50
Heavy trucks	280	47		50

I-10 EB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	800	1		
Cars	752	752		40
Medium Trucks	16	16		40
Heavy trucks	32	32		40

Travis entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	400	1		
Cars	376	376		40
Medium Trucks	8	8		40
Heavy trucks	16	16		40

I-45 NB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2700	2		
Cars	2538	1269		50
Medium Trucks	54	27		50
Heavy trucks	108	54		50

I-45 NB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2300	2		
Cars	2162	1081		50
Medium Trucks	46	23		50
Heavy trucks	92	46		50

I-69SB

Start to I-10 WB/I-10 EB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	12400	6		
Cars	11656	1943		50
Medium Trucks	248	41		50
Heavy trucks	496	83		50

I-10 WB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2000	1		
Cars	1880	1880		40
Medium Trucks	40	40		40
Heavy trucks	80	80		40

I-10 EB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1300	1		
Cars	1222	1222		40
Medium Trucks	26	26		40
Heavy trucks	52	52		40

I-69 SBFR				
TNM Roadway		Enter in TNM		
ADT=	1,865	# Lanes	Speed	
Kfactor =	0.060			
DHV=	112	2		
Cars	105	53		35
Medium Trucks	2	1		35
Heavy trucks	4	2		35

I-69 SB HOV (reversible)				
TNM Roadway		Enter in TNM		
ADT=	3,800	# Lanes	Speed	
Kfactor =	0.060			
DHV=	228	1		
Cars	214	214		50
Medium Trucks	5	5		50
Heavy trucks	9	9		50

I-10 WB/I-10 EB exit to Lyons entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	9100	4		
Cars	8554	2139		50
Medium Trucks	182	46		50
Heavy trucks	364	91		50

Lyons entrance				
TNM Roadway		Enter in TNM		
2014 ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	700	1		
Cars	658	658		40
Medium Trucks	14	14		40
Heavy trucks	28	28		40

I-69 SBFR				
TNM Roadway		Enter in TNM		
ADT=	1,019	# Lanes	Speed	
Kfactor =	0.060			
DHV=	61	2		
Cars	57	29		35
Medium Trucks	1	1		35
Heavy trucks	2	1		35

I-69 SB HOV (reversible)				
TNM Roadway		Enter in TNM		
ADT=	3,800	# Lanes	Speed	
Kfactor =	0.060			
DHV=	228	1		
Cars	214	214		50
Medium Trucks	5	5		50
Heavy trucks	9	9		50

Lyons entrance to Jackson exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	9800	5		
Cars	9212	1842		50
Medium Trucks	196	39		50
Heavy trucks	392	78		50

Jackson exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1400	2		
Cars	1316	658		40
Medium Trucks	28	14		40
Heavy trucks	56	28		40

I-69 SB HOV (reversible)				
TNM Roadway		Enter in TNM		
ADT=	3,800	# Lanes	Speed	
Kfactor =	0.060			
DHV=	228	1		
Cars	214	214		50
Medium Trucks	5	5		50
Heavy trucks	9	9		50

Jackson exit to I-10 WB/I-10 EB/Hardy entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8400	3		
Cars	7896	2632		50
Medium Trucks	168	56		50
Heavy trucks	336	112		50

I-10 WB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1800	2		
Cars	1692	846		40
Medium Trucks	36	18		40
Heavy trucks	72	36		40

I-10 EB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	700	1		
Cars	658	658		40
Medium Trucks	14	14		40
Heavy trucks	28	28		40

Hardy entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	3000	1		
Cars	2820	2820		40
Medium Trucks	60	60		40
Heavy trucks	120	120		40

I-69 SB HOV (reversible)				
TNM Roadway		Enter in TNM		
ADT=	3,800	# Lanes	Speed	
Kfactor =	0.060			
DHV=	228	1		
Cars	214	214		50
Medium Trucks	5	5		50
Heavy trucks	9	9		50

I-10 WB/I-10 EB/Hardy entrance to I-45 NB/I-45 SB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	13900	4		
Cars	13066	3267		50
Medium Trucks	278	70		50
Heavy trucks	556	139		50

I-45 NB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	100	1		
Cars	94	94		40
Medium Trucks	2	2		40
Heavy trucks	4	4		40

I-45 SB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1700	2		
Cars	1598	799		40
Medium Trucks	34	17		40
Heavy trucks	68	34		40

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-45 NB/I-45 SB exit to SH-288 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	12200	3	
Cars	11468	3823	50
Medium Trucks	244	81	50
Heavy trucks	488	163	50

SH-288 SB exit to Webster entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	8900	2	
Cars	8366	4183	50
Medium Trucks	178	89	50
Heavy trucks	356	178	50

Webster entrance to SH-288 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	10300	2	
Cars	9682	4841	50
Medium Trucks	206	103	50
Heavy trucks	412	206	50

SH-288 SB entrance to Caroline exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	12400	4	
Cars	11656	2914	50
Medium Trucks	248	62	50
Heavy trucks	496	124	50

Caroline exit to SH-288 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	11200	4	
Cars	10528	2632	50
Medium Trucks	224	56	50
Heavy trucks	448	112	50

SH-288 NB entrance to Spur 527 entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	13100	4	
Cars	12314	3079	50
Medium Trucks	262	66	50
Heavy trucks	524	131	50

Spur 527 entrance to End			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	15900	6	
Cars	14946	2491	50
Medium Trucks	318	53	50
Heavy trucks	636	106	50

SH-288 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3300	2	
Cars	3102	1551	40
Medium Trucks	66	33	40
Heavy trucks	132	66	40

SH-288 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2500	2	
Cars	2350	1175	40
Medium Trucks	50	25	40
Heavy trucks	100	50	40

SH-288 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.007		
DHV=	1800	1	
Cars	1692	1692	40
Medium Trucks	36	36	40
Heavy trucks	72	72	40

Webster entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2200	2	
Cars	2068	1034	40
Medium Trucks	44	22	40
Heavy trucks	88	44	40

Caroline exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1200	1	
Cars	1128	1128	40
Medium Trucks	24	24	40
Heavy trucks	48	48	40

Spur 527 entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3900	2	
Cars	3666	1833	40
Medium Trucks	78	39	40
Heavy trucks	156	78	40

Hamilton			
TNM Roadway		Enter in TNM	
ADT=	4,612	# Lanes	Speed
Kfactor =	0.060		
DHV=	277	4	
Cars	260	65	35
Medium Trucks	6	1	35
Heavy trucks	11	3	35

Hamilton			
TNM Roadway		Enter in TNM	
ADT=	5,055	# Lanes	Speed
Kfactor =	0.060		
DHV=	303	3	
Cars	285	95	35
Medium Trucks	6	2	35
Heavy trucks	12	4	35

Hamilton			
TNM Roadway		Enter in TNM	
ADT=	5,144	# Lanes	Speed
Kfactor =	0.060		
DHV=	309	2	
Cars	290	145	35
Medium Trucks	6	3	35
Heavy trucks	12	6	35

Hamilton			
TNM Roadway		Enter in TNM	
ADT=	203	# Lanes	Speed
Kfactor =	0.060		
DHV=	12	1	
Cars	11	11	35
Medium Trucks	0	0	35
Heavy trucks	0	0	35

I-69 SB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=	9,188	# Lanes	Speed
Kfactor =	0.060		
DHV=	551	1	
Cars	518	518	50
Medium Trucks	11	11	50
Heavy trucks	22	22	50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-69NB

Start to Spur 527 and Main exits			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	15300	5	
Cars	14382	2876	50
Medium Trucks	306	61	50
Heavy trucks	612	122	50

Spur 527 and Main exits to San Jacinto entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	10600	3	
Cars	9964	3321	50
Medium Trucks	212	71	50
Heavy trucks	424	141	50

San Jacinto entrance to SH-288 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	11100	4	
Cars	10434	2609	50
Medium Trucks	222	56	50
Heavy trucks	444	111	50

SH-288 SB exit to SH-288 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	10500	4	
Cars	9870	2468	50
Medium Trucks	210	53	50
Heavy trucks	420	105	50

SH-288 NB exit to SH-288 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7600	3	
Cars	7144	2381	50
Medium Trucks	152	51	50
Heavy trucks	304	101	50

SH-288 NB entrance to Gray exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	11500	5	
Cars	10810	2162	50
Medium Trucks	230	46	50
Heavy trucks	460	92	50

Gray exit to McGowen entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	10200	4	
Cars	9588	2397	50
Medium Trucks	204	51	50
Heavy trucks	408	102	50

Main exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1200	1	
Cars	1128	1128	40
Medium Trucks	24	24	40
Heavy trucks	48	48	40

SH-288 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	600	1	
Cars	564	564	40
Medium Trucks	12	12	40
Heavy trucks	24	24	40

SH-288 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2900	2	
Cars	2726	1363	40
Medium Trucks	58	29	40
Heavy trucks	116	58	40

SH-288 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4000	2	
Cars	3760	1880	40
Medium Trucks	80	40	40
Heavy trucks	160	80	40

Spur 527 exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3500	2	
Cars	3290	1645	40
Medium Trucks	70	35	40
Heavy trucks	140	70	40

Gray exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1400	2	
Cars	1316	658	40
Medium Trucks	28	14	40
Heavy trucks	56	28	40

McGowen entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	800	1	
Cars	752	752	40
Medium Trucks	16	16	40
Heavy trucks	32	32	40

I-69 NB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=	9,188	# Lanes	Speed
Kfactor =	0.060		
DHV=	551	1	
Cars	518	518	50
Medium Trucks	11	11	50
Heavy trucks	22	22	50

Chartres			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	200	2	
Cars	188	94	35
Medium Trucks	4	2	35
Heavy trucks	8	4	35

Chartres			
TNM Roadway		Enter in TNM	
ADT=	9,516	# Lanes	Speed
Kfactor =	0.060		
DHV=	571	3	
Cars	537	179	35
Medium Trucks	11	4	35
Heavy trucks	23	8	35

Chartres			
TNM Roadway		Enter in TNM	
ADT=	8,391	# Lanes	Speed
Kfactor =	0.060		
DHV=	503	1	
Cars	473	473	35
Medium Trucks	10	10	35
Heavy trucks	20	20	35

Chartres			
TNM Roadway		Enter in TNM	
ADT=	10,503	# Lanes	Speed
Kfactor =	0.060		
DHV=	630	3	
Cars	592	197	35
Medium Trucks	13	4	35
Heavy trucks	25	8	35

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

McGowen entrance to Polk exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	10500	4	
Cars	9870	2468	50
Medium Trucks	210	53	50
Heavy trucks	420	105	50

Polk exit to I-45 NB/I-45 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	9800	3	
Cars	9212	3071	50
Medium Trucks	196	65	50
Heavy trucks	392	131	50

I-45 NB/I-45 SB entrance to I-10 EB/I-10 WB/Hardy/McKee exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	10800	4	
Cars	10152	2538	50
Medium Trucks	216	54	50
Heavy trucks	432	108	50

I-10 EB/I-10 WB/Hardy/McKee exit to Chenevert entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	6500	3	
Cars	6110	2037	50
Medium Trucks	130	43	50
Heavy trucks	260	87	50

Chenevert entrance to Lyons exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7900	5	
Cars	7426	1485	50
Medium Trucks	158	32	50
Heavy trucks	316	63	50

Lyons exit to I-10 WB/I-10 EB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7600	4	
Cars	7144	1786	50
Medium Trucks	152	38	50
Heavy trucks	304	76	50

I-10 WB/I-10 EB entrance to End			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	11300	6	
Cars	10622	1770	50
Medium Trucks	226	38	50
Heavy trucks	452	75	50

I-45 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	900	1	
Cars	846	846	40
Medium Trucks	18	18	40
Heavy trucks	36	36	40

I-10 WB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	200	1	
Cars	188	188	40
Medium Trucks	4	4	40
Heavy trucks	8	8	40

I-10 WB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	900	1	
Cars	846	846	40
Medium Trucks	18	18	40
Heavy trucks	36	36	40

Polk exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1200	1	
Cars	1128	1128	40
Medium Trucks	24	24	40
Heavy trucks	48	48	40

I-45 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	100	1	
Cars	94	94	40
Medium Trucks	2	2	40
Heavy trucks	4	4	40

I-10 EB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2000	1	
Cars	1880	1880	40
Medium Trucks	40	40	40
Heavy trucks	80	80	40

Chenevert entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1400	2	
Cars	1316	658	40
Medium Trucks	28	14	40
Heavy trucks	56	28	40

Lyons exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	300	1	
Cars	282	282	40
Medium Trucks	6	6	40
Heavy trucks	12	12	40

I-10 EB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2800	2	
Cars	2632	1316	40
Medium Trucks	56	28	40
Heavy trucks	112	56	40

Chartres			
TNM Roadway		Enter in TNM	
ADT=	19,354	# Lanes	Speed
Kfactor =	0.060		
DHV=	1161	4	
Cars	1092	273	35
Medium Trucks	23	6	35
Heavy trucks	46	12	35

Chartres			
TNM Roadway		Enter in TNM	
ADT=	27,899	# Lanes	Speed
Kfactor =	0.060		
DHV=	1674	5	
Cars	1574	315	35
Medium Trucks	33	7	35
Heavy trucks	67	13	35

Hardy exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2200	1	
Cars	2068	2068	40
Medium Trucks	44	44	40
Heavy trucks	88	88	40

I-69 NBFR			
TNM Roadway		Enter in TNM	
ADT=	1,536	# Lanes	Speed
Kfactor =	0.060		
DHV=	92	2	
Cars	87	43	35
Medium Trucks	2	1	35
Heavy trucks	4	2	35

I-69 NBFR			
TNM Roadway		Enter in TNM	
ADT=	1,536	# Lanes	Speed
Kfactor =	0.060		
DHV=	92	2	
Cars	87	43	35
Medium Trucks	2	1	35
Heavy trucks	4	2	35

Chartres			
TNM Roadway		Enter in TNM	
ADT=	14,255	# Lanes	Speed
Kfactor =	0.060		
DHV=	855	2	
Cars	804	402	35
Medium Trucks	17	9	35
Heavy trucks	34	17	35

Chartres			
TNM Roadway		Enter in TNM	
ADT=	25,585	# Lanes	Speed
Kfactor =	0.060		
DHV=	1535	4	
Cars	1443	361	35
Medium Trucks	31	8	35
Heavy trucks	61	15	35

I-69 NB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=	3,800	# Lanes	Speed
Kfactor =	0.060		
DHV=	228	1	
Cars	214	214	50
Medium Trucks	5	5	50
Heavy trucks	9	9	50

I-69 NB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=	3,800	# Lanes	Speed
Kfactor =	0.060		
DHV=	228	1	
Cars	214	214	50
Medium Trucks	5	5	50
Heavy trucks	9	9	50

I-69 NB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=	3,800	# Lanes	Speed
Kfactor =	0.060		
DHV=	228	1	
Cars	214	214	50
Medium Trucks	5	5	50
Heavy trucks	9	9	50

I-69 NB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=	3,800	# Lanes	Speed
Kfactor =	0.060		
DHV=	228	1	
Cars	214	214	50
Medium Trucks	5	5	50
Heavy trucks	9	9	50

SH-288SB

I-45 NB/I-45 SB entrance to I-69 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7100	4	
Cars	6674	1669	50
Medium Trucks	142	36	50
Heavy trucks	284	71	50

I-69SB exit to Jackson entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	5000	2	
Cars	4700	2350	50
Medium Trucks	100	50	50
Heavy trucks	200	100	50

Jackson entrance to I-69 NB and I-69 SB/Webster/Hamilton entrances			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	5300	2	
Cars	4982	2491	50
Medium Trucks	106	53	50
Heavy trucks	212	106	50

I-69NB and I-69 SB/Webster/Hamilton entrances to End			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	10000	5	
Cars	9400	1880	50
Medium Trucks	200	40	50
Heavy trucks	400	80	50

I-69 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2500	2	
Cars	2350	1175	40
Medium Trucks	50	25	40
Heavy trucks	100	50	40

I-69 SB/Webster entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3900	2	
Cars	3666	1833	40
Medium Trucks	78	39	40
Heavy trucks	156	78	40

Jackson entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	700	1	
Cars	658	658	40
Medium Trucks	14	14	40
Heavy trucks	28	28	40

I-69 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	600	1	
Cars	564	564	40
Medium Trucks	12	12	40
Heavy trucks	24	24	40

Chenevert entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	900	1	
Cars	846	846	40
Medium Trucks	18	18	40
Heavy trucks	36	36	40

SH-288NB

Start to I-69 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	11100	4	
Cars	10434	2609	50
Medium Trucks	222	56	50
Heavy trucks	444	111	50

I-69 SB exit to I-69 NB/Chartres exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	8900	4	
Cars	8366	2092	50
Medium Trucks	178	45	50
Heavy trucks	356	89	50

I-69 SB/Caroline exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2200	1	
Cars	2068	2068	40
Medium Trucks	44	44	40
Heavy trucks	88	88	40

I-69 NB/Chartres exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4200	2	
Cars	3948	1974	40
Medium Trucks	84	42	40
Heavy trucks	168	84	40

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-69 NB/Chartres exit to Chenevert exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4700	3	
Cars	4418	1473	50
Medium Trucks	94	31	50
Heavy trucks	188	63	50

Chenevert exit to I-69 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4200	2	
Cars	3948	1974	50
Medium Trucks	84	42	50
Heavy trucks	168	84	50

I-69 NB entrance to I-45NB/I-45 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	6900	4	
Cars	6486	1622	50
Medium Trucks	138	35	50
Heavy trucks	276	69	50

I-69 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2900	2	
Cars	2726	1363	40
Medium Trucks	58	29	40
Heavy trucks	116	58	40

Chenevert exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	700	1	
Cars	658	658	40
Medium Trucks	14	14	40
Heavy trucks	28	28	40

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

TRAFFIC DATA FOR NOISE MODELING (YEAR 2035)
NHHIP - SEGMENT 3 (Alternative 11)

MAINLANES
DIRECT CONNECTORS
RAMPS
FRONTAGE ROADS
MANAGED LANES

ML & FR	
Growth Rate =	1%
Kfactor =	0.06
%Cars=	0.94
%Medium Trucks=	0.02
%Heavy Trucks=	0.04

	Information needed
	Calculated fields

QA/QC:

Source of traffic: CDM Smith, H-GAC modified regional travel demand model, received 1/29/15

Source of traffic factors: CDM Smith, raw traffic data for Segment 1 (IH45 south of Gulf Bank Road), received 2/6/15

Existing conditions - speed is posted; Predicted - Speed is design speed (rec'd from Joel S. on 3-6-15)

Assumptions:

1. traffic factors same for all segments
2. averaged daily traffic for smaller sections within each segment
3. ADT not included when DHV was provided by CDM Smith

I-10EB

Start to I-45 NB/I-45 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	8600	5	
Cars	8084	1617	50
Medium Trucks	172	34	50
Heavy trucks	344	69	50

I-45 NB/I-45 SB exit to Downtown Connector exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	5600	4	
Cars	5264	1316	50
Medium Trucks	112	28	50
Heavy trucks	224	56	50

Downtown Connector exit to Smith exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3900	4	
Cars	3666	917	50
Medium Trucks	78	20	50
Heavy trucks	156	39	50

Smith exit to Downtown Connector and I-45 SB entrances			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3500	3	
Cars	3290	1097	50
Medium Trucks	70	23	50
Heavy trucks	140	47	50

Downtown Connector and I-45 SB entrances to McKee exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7600	5	
Cars	7144	1429	50
Medium Trucks	152	30	50
Heavy trucks	304	61	50

I-45 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	1	
Cars	1034	1034	40
Medium Trucks	22	22	40
Heavy trucks	44	44	40

Downtown Connector exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1900	1	
Cars	1786	1786	40
Medium Trucks	38	38	40
Heavy trucks	76	76	40

Downtown Connector entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2500	2	
Cars	2350	1175	40
Medium Trucks	50	25	40
Heavy trucks	100	50	40

I-45 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2000	2	
Cars	1880	940	40
Medium Trucks	40	20	40
Heavy trucks	80	40	40

Smith exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1200	2	
Cars	1128	564	40
Medium Trucks	24	12	40
Heavy trucks	48	24	40

I-45 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1600	1	
Cars	1504	1504	40
Medium Trucks	32	32	40
Heavy trucks	64	64	40

McKee exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	500	1	
Cars	470	470	40
Medium Trucks	10	10	40
Heavy trucks	20	20	40

I-10 EB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2200	1	
Cars	2068	2068	50
Medium Trucks	44	44	50
Heavy trucks	88	88	50

I-10 EB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2200	3	
Cars	2068	689	50
Medium Trucks	44	15	50
Heavy trucks	88	29	50

I-10 EB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2200	3	
Cars	2068	689	50
Medium Trucks	44	15	50
Heavy trucks	88	29	50

I-10 EB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2200	3	
Cars	2068	689	50
Medium Trucks	44	15	50
Heavy trucks	88	29	50

I-10 EB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1600	2	
Cars	1504	752	50
Medium Trucks	32	16	50
Heavy trucks	64	32	50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

McKee exit to San Jacinto entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	7200	4		
Cars	6768	1692		50
Medium Trucks	144	36		50
Heavy trucks	288	72		50

San Jacinto entrance to Hamilton/I-69 SB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8600	5		
Cars	8084	1617		50
Medium Trucks	172	34		50
Heavy trucks	344	69		50

Hamilton/I-69 SB exit to Jensen exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	7300	4		
Cars	6862	1716		50
Medium Trucks	146	37		50
Heavy trucks	292	73		50

Jensen exit to I-69 NB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	7000	4		
Cars	6580	1645		50
Medium Trucks	140	35		50
Heavy trucks	280	70		50

I-69 NB exit to I-69NB/I-69 SB/Chartres and I-10 EB HOV entrances				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	4700	2		
Cars	4418	2209		50
Medium Trucks	94	47		50
Heavy trucks	188	94		50

I-69NB/I-69 SB/Chartres and I-10 EB HOV entrances to Waco exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	9200	6		
Cars	8648	1441		50
Medium Trucks	184	31		50
Heavy trucks	368	61		50

Waco exit to End				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8800	4		
Cars	8272	2068		50
Medium Trucks	176	44		50
Heavy trucks	352	88		50

Hamilton/I-69 SB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1400	1		
Cars	1316	1316		40
Medium Trucks	28	28		40
Heavy trucks	56	56		40

I-69 NB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2300	2		
Cars	2162	1081		40
Medium Trucks	46	23		40
Heavy trucks	92	46		40

I-69 NB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1400	1		
Cars	1316	1316		40
Medium Trucks	28	28		40
Heavy trucks	56	56		40

San Jacinto entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.940			
DHV=	1400	1		
Cars	1316	1316		40
Medium Trucks	28	28		40
Heavy trucks	56	56		40

Jensen exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	300	1		
Cars	282	282		40
Medium Trucks	6	6		40
Heavy trucks	12	12		40

Chartres entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	900	1		
Cars	846	846		40
Medium Trucks	18	18		40
Heavy trucks	36	36		40

Waco exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	400	1		
Cars	376	376		40
Medium Trucks	8	8		40
Heavy trucks	16	16		40

I-10 EBFR				
TNM Roadway		Enter in TNM		
ADT=	4,679	# Lanes	Speed	
Kfactor =	0.060			
DHV=	281	2		
Cars	264	132		35
Medium Trucks	6	3		35
Heavy trucks	11	6		35

I-10 EBFR				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	0	2		
Cars	0	0		35
Medium Trucks	0	0		35
Heavy trucks	0	0		35

I-10 EBFR				
TNM Roadway		Enter in TNM		
ADT=	4,679	# Lanes	Speed	
Kfactor =	0.060			
DHV=	281	2		
Cars	264	132		35
Medium Trucks	6	3		35
Heavy trucks	11	6		35

I-10 EBFR				
TNM Roadway		Enter in TNM		
ADT=	4,679	# Lanes	Speed	
Kfactor =	0.060			
DHV=	281	2		
Cars	264	132		35
Medium Trucks	6	3		35
Heavy trucks	11	6		35

I-69 SB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1000	1		
Cars	940	940		40
Medium Trucks	20	20		40
Heavy trucks	40	40		40

I-10 EBFR				
TNM Roadway		Enter in TNM		
ADT=	2,883	# Lanes	Speed	
Kfactor =	0.060			
DHV=	173	2		
Cars	163	81		35
Medium Trucks	3	2		35
Heavy trucks	7	3		35

I-10 EBFR				
TNM Roadway		Enter in TNM		
ADT=	2,883	# Lanes	Speed	
Kfactor =	0.060			
DHV=	173	2		
Cars	163	81		35
Medium Trucks	3	2		35
Heavy trucks	7	3		35

I-10 EB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1600	2		
Cars	1504	752		50
Medium Trucks	32	16		50
Heavy trucks	64	32		50

I-10 EB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1600	2		
Cars	1504	752		50
Medium Trucks	32	16		50
Heavy trucks	64	32		50

I-10 EB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1600	2		
Cars	1504	752		50
Medium Trucks	32	16		50
Heavy trucks	64	32		50

I-10 EB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1600	2		
Cars	1504	752		50
Medium Trucks	32	16		50
Heavy trucks	64	32		50

I-10 EB HOV entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1600	2		
Cars	1504	752		40
Medium Trucks	32	16		40
Heavy trucks	64	32		40

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-10WB

Start to Waco entrance/I-10 WB HOV exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	9500	4		
Cars	8930	2233	50	
Medium Trucks	190	48	50	
Heavy trucks	380	95	50	

Waco entrance/I-10 WB HOV exit to Gregg exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8200	5		
Cars	7708	1542	50	
Medium Trucks	164	33	50	
Heavy trucks	328	66	50	

Gregg exit to I-69 NB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	7900	4		
Cars	7426	1857	50	
Medium Trucks	158	40	50	
Heavy trucks	316	79	50	

I-69 NB exit to I-69 SB/Hamilton and Elysian exits				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	7500	4		
Cars	7050	1763	50	
Medium Trucks	150	38	50	
Heavy trucks	300	75	50	

I-69 SB/Hamilton and Elysian exits to I-69 SB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	3400	3		
Cars	3196	1065	50	
Medium Trucks	68	23	50	
Heavy trucks	136	45	50	

I-69 SB entrance to I-69 NB/Chartres entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	4000	3		
Cars	3760	1253	50	
Medium Trucks	80	27	50	
Heavy trucks	160	53	50	

I-69 NB/Chartres entrance to McKee entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	5200	3		
Cars	4888	1629	50	
Medium Trucks	104	35	50	
Heavy trucks	208	69	50	

I-10 WB HOV exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1700	2		
Cars	1598	799	40	
Medium Trucks	34	17	40	
Heavy trucks	68	34	40	

I-69 NB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	900	1		
Cars	846	846	40	
Medium Trucks	18	18	40	
Heavy trucks	36	36	40	

I-69 SB/Hamilton exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	3200	2		
Cars	3008	1504	40	
Medium Trucks	64	32	40	
Heavy trucks	128	64	40	

I-69 SB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	600	1		
Cars	564	564	40	
Medium Trucks	12	12	40	
Heavy trucks	24	24	40	

I-69 NB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	400	1		
Cars	376	376	40	
Medium Trucks	8	8	40	
Heavy trucks	16	16	40	

Waco entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	400	1		
Cars	376	376	40	
Medium Trucks	8	8	40	
Heavy trucks	16	16	40	

Gregg exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	300	1		
Cars	282	282	40	
Medium Trucks	6	6	40	
Heavy trucks	12	12	40	

Elysian exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	900	1		
Cars	846	846	40	
Medium Trucks	18	18	40	
Heavy trucks	36	36	40	

Chartres entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1600	1		
Cars	1504	1504	40	
Medium Trucks	32	32	40	
Heavy trucks	64	64	40	

McKee entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2400	1		
Cars	2256	2256	40	
Medium Trucks	48	48	40	
Heavy trucks	96	96	40	

I-10 WBFR				
TNM Roadway		Enter in TNM		
ADT=	838	# Lanes	Speed	
Kfactor =	0.060			
DHV=	50	2		
Cars	47	24	35	
Medium Trucks	1	1	35	
Heavy trucks	2	1	35	

I-10 WBFR				
TNM Roadway		Enter in TNM		
ADT=	838	# Lanes	Speed	
Kfactor =	0.060			
DHV=	350	2		
Cars	329	165	35	
Medium Trucks	7	4	35	
Heavy trucks	14	7	35	

I-10 WBFR				
TNM Roadway		Enter in TNM		
ADT=	838	# Lanes	Speed	
Kfactor =	0.060			
DHV=	50	2		
Cars	47	24	35	
Medium Trucks	1	1	35	
Heavy trucks	2	1	35	

I-10WB FR				
TNM Roadway		Enter in TNM		
ADT=	838	# Lanes	Speed	
Kfactor =	0.060			
DHV=	50	2		
Cars	47	24	35	
Medium Trucks	1	1	35	
Heavy trucks	2	1	35	

I-10 WBFR				
TNM Roadway		Enter in TNM		
ADT=	3,183	# Lanes	Speed	
Kfactor =	0.060			
DHV=	150	2		
Cars	141	71	35	
Medium Trucks	3	2	35	
Heavy trucks	6	3	35	

I-10 WBFR				
TNM Roadway		Enter in TNM		
ADT=	3,183	# Lanes	Speed	
Kfactor =	0.060			
DHV=	250	3		
Cars	235	78	35	
Medium Trucks	5	2	35	
Heavy trucks	10	3	35	

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1700	2		
Cars	1598	799	50	
Medium Trucks	34	17	50	
Heavy trucks	68	34	50	

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1700	2		
Cars	1598	799	50	
Medium Trucks	34	17	50	
Heavy trucks	68	34	50	

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1700	2		
Cars	1598	799	50	
Medium Trucks	34	17	50	
Heavy trucks	68	34	50	

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1700	2		
Cars	1598	799	50	
Medium Trucks	34	17	50	
Heavy trucks	68	34	50	

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1700	2		
Cars	1598	799	50	
Medium Trucks	34	17	50	
Heavy trucks	68	34	50	

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1700	2		
Cars	1598	799	50	
Medium Trucks	34	17	50	
Heavy trucks	68	34	50	

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

McKee entrance to Downtown Connector exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7300	4	
Cars	6862	1716	50
Medium Trucks	146	37	50
Heavy trucks	292	73	50

Downtown Connector exit to I-45 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	5300	3	
Cars	4982	1661	50
Medium Trucks	106	35	50
Heavy trucks	212	71	50

I-45 NB entrance to I-45 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	8200	5	
Cars	7708	1542	50
Medium Trucks	164	33	50
Heavy trucks	328	66	50

I-45 NB exit to Louisiana entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7300	4	
Cars	6862	1716	50
Medium Trucks	146	37	50
Heavy trucks	292	73	50

Louisiana entrance to Downtown Connector entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	8000	5	
Cars	7520	1504	50
Medium Trucks	160	32	50
Heavy trucks	320	64	50

Downtown Connector entrance to I-45 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	10000	5	
Cars	9400	1880	50
Medium Trucks	200	40	50
Heavy trucks	400	80	50

I-45 SB entrance to End			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	11300	6	
Cars	10622	1770	50
Medium Trucks	226	38	50
Heavy trucks	452	75	50

Downtown Connector exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2000	1	
Cars	1880	1880	40
Medium Trucks	40	40	40
Heavy trucks	80	80	40

I-45 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2900	2	
Cars	2726	1363	40
Medium Trucks	58	29	40
Heavy trucks	116	58	40

I-45 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1300	1	
Cars	1222	1222	40
Medium Trucks	26	26	40
Heavy trucks	52	52	40

Louisiana entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1200	1	
Cars	1128	1128	40
Medium Trucks	24	24	40
Heavy trucks	48	48	40

Downtown Connector entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2000	1	
Cars	1880	1880	40
Medium Trucks	40	40	40
Heavy trucks	80	80	40

I-45 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1500	1	
Cars	1410	1410	40
Medium Trucks	30	30	40
Heavy trucks	60	60	40

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1700	2	
Cars	1598	799	50
Medium Trucks	34	17	50
Heavy trucks	68	34	50

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1700	2	
Cars	1598	799	50
Medium Trucks	34	17	50
Heavy trucks	68	34	50

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1700	2	
Cars	1598	799	50
Medium Trucks	34	17	50
Heavy trucks	68	34	50

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1700	2	
Cars	1598	799	50
Medium Trucks	34	17	50
Heavy trucks	68	34	50

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2100	2	
Cars	1974	987	50
Medium Trucks	42	21	50
Heavy trucks	84	42	50

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2100	2	
Cars	1974	987	50
Medium Trucks	42	21	50
Heavy trucks	84	42	50

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2100	1	
Cars	1974	1974	50
Medium Trucks	42	42	50
Heavy trucks	84	84	50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-45SB

Start to Quitman exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	9000	6	
Cars	8460	1410	50
Medium Trucks	180	30	50
Heavy trucks	360	60	50

Quitman exit to I-10 WB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	8600	6	
Cars	8084	1347	50
Medium Trucks	172	29	50
Heavy trucks	344	57	50

I-10 WB exit to Downtown Connector exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7100	5	
Cars	6674	1335	50
Medium Trucks	142	28	50
Heavy trucks	284	57	50

Downtown Connector exit to I-45 SB HOV entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4600	3	
Cars	4324	1441	50
Medium Trucks	92	31	50
Heavy trucks	184	61	50

I-45 SB HOV entrance to I-10 EB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	5300	3	
Cars	4982	1661	50
Medium Trucks	106	35	50
Heavy trucks	212	71	50

I-10 EB entrance to Milam exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7300	4	
Cars	6862	1716	50
Medium Trucks	146	37	50
Heavy trucks	292	73	50

Milam exit to I-10 EB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	5500	3	
Cars	5170	1723	50
Medium Trucks	110	37	50
Heavy trucks	220	73	50

I-10 WB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1500	1	
Cars	1410	1410	40
Medium Trucks	30	30	40
Heavy trucks	60	60	40

Downtown Connector exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2500	2	
Cars	2350	1175	40
Medium Trucks	50	25	40
Heavy trucks	100	50	40

I-45 SB HOV entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	800	1	
Cars	752	752	40
Medium Trucks	16	16	40
Heavy trucks	32	32	40

I-10 EB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2000	2	
Cars	1880	940	40
Medium Trucks	40	20	40
Heavy trucks	80	40	40

I-10 EB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1600	1	
Cars	1504	1504	40
Medium Trucks	32	32	40
Heavy trucks	64	64	40

Quitman exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	500	2	
Cars	470	235	40
Medium Trucks	10	5	40
Heavy trucks	20	10	40

Milam exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1800	1	
Cars	1692	1692	40
Medium Trucks	36	36	40
Heavy trucks	72	72	40

I-45 SB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1400	2	
Cars	1316	658	50
Medium Trucks	28	14	50
Heavy trucks	56	28	50

I-45 SB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1400	2	
Cars	1316	658	50
Medium Trucks	28	14	50
Heavy trucks	56	28	50

I-45 SB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1400	2	
Cars	1316	658	50
Medium Trucks	28	14	50
Heavy trucks	56	28	50

I-45 SB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	700		
DHV=	0	2	
Cars	0	0	50
Medium Trucks	0	0	50
Heavy trucks	0	0	50

I-45 SB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	700	2	
Cars	658	329	50
Medium Trucks	14	7	50
Heavy trucks	28	14	50

I-45 SB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	700	2	
Cars	658	329	50
Medium Trucks	14	7	50
Heavy trucks	28	14	50

I-45 SB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	700	2	
Cars	658	329	50
Medium Trucks	14	7	50
Heavy trucks	28	14	50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-10 EB exit to I-69 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4100	3	
Cars	3854	1285	50
Medium Trucks	82	27	50
Heavy trucks	164	55	50

I-69 SB exit to SH-288 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3600	3	
Cars	3384	1128	50
Medium Trucks	72	24	50
Heavy trucks	144	48	50

SH-288 SB exit to I-69 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2300	3	
Cars	2162	721	50
Medium Trucks	46	15	50
Heavy trucks	92	31	50

I-69 SB entrance to End			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4100	4	
Cars	3854	964	50
Medium Trucks	82	21	50
Heavy trucks	164	41	50

I-69 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	600	1	
Cars	564	564	40
Medium Trucks	12	12	40
Heavy trucks	24	24	40

SH-288 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1200	1	
Cars	1128	1128	40
Medium Trucks	24	24	40
Heavy trucks	48	48	40

I-69 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1800	1	
Cars	1692	1692	40
Medium Trucks	36	36	40
Heavy trucks	72	72	40

SH-288 NB/I-69 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3200	2	
Cars	3008	1504	40
Medium Trucks	64	32	40
Heavy trucks	128	64	40

Jefferson entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1800	1	
Cars	1692	1692	40
Medium Trucks	36	36	40
Heavy trucks	72	72	40

I-45 SB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=	13,380	# Lanes	Speed
Kfactor =	0.060		
DHV=	803	1	
Cars	755	755	50
Medium Trucks	16	16	50
Heavy trucks	32	32	50

I-45NB

SH-288 SB/I-69 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4200	2	
Cars	3948	1974	40
Medium Trucks	84	42	40
Heavy trucks	168	84	40

I-69 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1000	1	
Cars	940	940	40
Medium Trucks	20	20	40
Heavy trucks	40	40	40

I-45 NBFR			
TNM Roadway		Enter in TNM	
ADT=	26,710	# Lanes	Speed
Kfactor =	0.060		
DHV=	1603	3	
Cars	1506	502	35
Medium Trucks	32	11	35
Heavy trucks	64	21	35

I-45 NB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=	13,380	# Lanes	Speed
Kfactor =	0.060		
DHV=	803	1	
Cars	755	755	50
Medium Trucks	16	16	50
Heavy trucks	32	32	50

Start to SH-288 NB/I-69 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3200	3	
Cars	3008	1003	50
Medium Trucks	64	21	50
Heavy trucks	128	43	50

SH-288 NB/I-69 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2500	2	
Cars	2350	1175	40
Medium Trucks	50	25	40
Heavy trucks	100	50	40

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

SH-288 NB/I-69 NB entrance to I-10 WB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	5600	4	
Cars	5264	1316	50
Medium Trucks	112	28	50
Heavy trucks	224	56	50

I-10 WB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2900	2	
Cars	2726	1363	40
Medium Trucks	58	29	40
Heavy trucks	116	58	40

I-10WB exit to I-10WB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2700	3	
Cars	2538	846	50
Medium Trucks	54	18	50
Heavy trucks	108	36	50

I-10 WB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1300	1	
Cars	1222	1222	40
Medium Trucks	26	26	40
Heavy trucks	52	52	40

I-10WB entrance to DT Connector/Travis entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3700	4	
Cars	3478	870	50
Medium Trucks	74	19	50
Heavy trucks	148	37	50

Downtown Connector entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3000	1	
Cars	2820	2820	40
Medium Trucks	60	60	40
Heavy trucks	120	120	40

Travis entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	700	1	
Cars	658	658	40
Medium Trucks	14	14	40
Heavy trucks	28	28	40

I-45 NB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	900	2	
Cars	846	423	50
Medium Trucks	18	9	50
Heavy trucks	36	18	50

Downtown Connector/Travis entrance to End			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7300	6	
Cars	6862	1144	50
Medium Trucks	146	24	50
Heavy trucks	292	49	50

I-10 EB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	1	
Cars	1034	1034	40
Medium Trucks	22	22	40
Heavy trucks	44	44	40

Quitman entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	400	1	
Cars	376	376	40
Medium Trucks	8	8	40
Heavy trucks	16	16	40

I-45 NB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	900	2	
Cars	846	423	50
Medium Trucks	18	9	50
Heavy trucks	36	18	50

I-45 NB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	900	2	
Cars	846	423	50
Medium Trucks	18	9	50
Heavy trucks	36	18	50

I-69SB

Start to I-10 WB/I-10 EB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	13000	6	
Cars	12220	2037	50
Medium Trucks	260	43	50
Heavy trucks	520	87	50

I-10 WB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	600	1	
Cars	564	564	40
Medium Trucks	12	12	40
Heavy trucks	24	24	40

I-10 EB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	900	1	
Cars	846	846	40
Medium Trucks	18	18	40
Heavy trucks	36	36	40

I-69 SBFR			
TNM Roadway		Enter in TNM	
ADT=	1,865	# Lanes	Speed
Kfactor =	0.060		
DHV=	112	2	
Cars	105	53	35
Medium Trucks	2	1	35
Heavy trucks	4	2	35

I-69SB HOV			
TNM Roadway		Enter in TNM	
ADT=	3,800	# Lanes	Speed
Kfactor =	0.060		
DHV=	228	1	
Cars	214	214	50
Medium Trucks	5	5	50
Heavy trucks	9	9	50

I-10 WB/I-10 EB exit to Lyons entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	11400	4	
Cars	10716	2679	50
Medium Trucks	228	57	50
Heavy trucks	456	114	50

Lyons entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1200	1	
Cars	1128	1128	40
Medium Trucks	24	24	40
Heavy trucks	48	48	40

Lyons entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1200	1	
Cars	1128	1128	40
Medium Trucks	24	24	40
Heavy trucks	48	48	40

I-69 SBFR			
TNM Roadway		Enter in TNM	
ADT=	1,019	# Lanes	Speed
Kfactor =	0.060		
DHV=	61	2	
Cars	57	29	35
Medium Trucks	1	1	35
Heavy trucks	2	1	35

I-69SB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=	3,800	# Lanes	Speed
Kfactor =	0.060		
DHV=	228	1	
Cars	214	214	50
Medium Trucks	5	5	50
Heavy trucks	9	9	50

Lyons entrance to Jackson exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	12600	5	
Cars	11844	2369	50
Medium Trucks	252	50	50
Heavy trucks	504	101	50

Jackson exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1700	2	
Cars	1598	799	40
Medium Trucks	34	17	40
Heavy trucks	68	34	40

I-69SB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=	3,800	# Lanes	Speed
Kfactor =	0.060		
DHV=	228	1	
Cars	214	214	50
Medium Trucks	5	5	50
Heavy trucks	9	9	50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

Jackson exit to I-10 WB/I-10 EB/Hardy/I-45 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	10900	3	
Cars	10246	3415	50
Medium Trucks	218	73	50
Heavy trucks	436	145	50

I-10 WB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2800	2	
Cars	2632	1316	40
Medium Trucks	56	28	40
Heavy trucks	112	56	40

I-10 EB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1200	1	
Cars	1128	1128	40
Medium Trucks	24	24	40
Heavy trucks	48	48	40

I-45 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	600	1	
Cars	564	564	40
Medium Trucks	12	12	40
Heavy trucks	24	24	40

Hardy entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3100	1	
Cars	2914	2914	40
Medium Trucks	62	62	40
Heavy trucks	124	124	40

I-10 WB/I-10 EB/Hardy/I-45 SB entrance to I-45 SB and Bell exits			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	18400	6	
Cars	17296	2883	50
Medium Trucks	368	61	50
Heavy trucks	736	123	50

I-45 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1800	1	
Cars	1692	1692	40
Medium Trucks	36	36	40
Heavy trucks	72	72	40

Bell exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1900	1	
Cars	1786	1786	40
Medium Trucks	38	38	40
Heavy trucks	76	76	40

I-45 SB and Bell exits to SH-288 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	14700	5	
Cars	13818	2764	50
Medium Trucks	294	59	50
Heavy trucks	588	118	50

SH-288 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4400	2	
Cars	4136	2068	40
Medium Trucks	88	44	40
Heavy trucks	176	88	40

Hamilton			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	570	4	
Cars	536	134	35
Medium Trucks	11	3	35
Heavy trucks	23	6	35

SH-288 SB exit to I-45 NB and Webster entrances			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	10400	4	
Cars	9776	2444	50
Medium Trucks	208	52	50
Heavy trucks	416	104	50

I-45 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2000	1	
Cars	1880	1880	40
Medium Trucks	40	40	40
Heavy trucks	80	80	40

Webster entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2200	2	
Cars	2068	1034	40
Medium Trucks	44	22	40
Heavy trucks	88	44	40

Hamilton			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	315	3	
Cars	296	99	35
Medium Trucks	6	2	35
Heavy trucks	13	4	35

Hamilton			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	428	2	
Cars	402	201	35
Medium Trucks	9	4	35
Heavy trucks	17	9	35

I-45 NB and Webster entrances to Alameda exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	14100	6	
Cars	13254	2209	50
Medium Trucks	282	47	50
Heavy trucks	564	94	50

SH-288 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.007		
DHV=	1500	1	
Cars	1410	1410	40
Medium Trucks	30	30	40
Heavy trucks	60	60	40

Alameda exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1400	2	
Cars	1316	658	40
Medium Trucks	28	14	40
Heavy trucks	56	28	40

Hamilton			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	12	1	
Cars	11	11	35
Medium Trucks	0	0	35
Heavy trucks	0	0	35

Alameda exit to SH-288 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	12800	4	
Cars	12032	3008	50
Medium Trucks	256	64	50
Heavy trucks	512	128	50

SH-288 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.007		
DHV=	1500	1	
Cars	1410	1410	40
Medium Trucks	30	30	40
Heavy trucks	60	60	40

SH-288 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.007		
DHV=	1500	1	
Cars	1410	1410	40
Medium Trucks	30	30	40
Heavy trucks	60	60	40

SH-288 NB entrance to Spur 527 entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	14300	4	
Cars	13442	3361	50
Medium Trucks	286	72	50
Heavy trucks	572	143	50

Spur 527 entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4200	2	
Cars	3948	1974	40
Medium Trucks	84	42	40
Heavy trucks	168	84	40

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

Spur 527 entrance to End				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	17200	6		
Cars	16168	2695		50
Medium Trucks	344	57		50
Heavy trucks	688	115		50

I-69 SB HOV (reversible)				
TNM Roadway		Enter in TNM		
ADT=	9,188	# Lanes	Speed	
Kfactor =	0.060			
DHV=	551	1		
Cars	518	518		50
Medium Trucks	11	11		50
Heavy trucks	22	22		50

I-69NB

Start to Spur 527 exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	10400	5		
Cars	9776	1955		50
Medium Trucks	208	42		50
Heavy trucks	416	83		50

Spur 527 exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	3100	2		
Cars	2914	1457		40
Medium Trucks	62	31		40
Heavy trucks	124	62		40

I-69 NB HOV (reversible)				
TNM Roadway		Enter in TNM		
ADT=	9,188	# Lanes	Speed	
Kfactor =	0.060			
DHV=	551	1		
Cars	518	518		50
Medium Trucks	11	11		50
Heavy trucks	22	22		50

Spur 527 exit to Main exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	7200	5		
Cars	6768	1354		50
Medium Trucks	144	29		50
Heavy trucks	288	58		50

Main exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1000	1		
Cars	940	940		40
Medium Trucks	20	20		40
Heavy trucks	40	40		40

Spur 527/Main exit to San Jacinto entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	6200	5		
Cars	5828	1166		50
Medium Trucks	124	25		50
Heavy trucks	248	50		50

San Jacinto entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1400	1		
Cars	1316	1316		40
Medium Trucks	28	28		40
Heavy trucks	56	56		40

San Jacinto entrance to SH-288 SB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	7000	6		
Cars	6580	1097		50
Medium Trucks	140	23		50
Heavy trucks	280	47		50

SH-288 SB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	900	1		
Cars	846	846		40
Medium Trucks	18	18		40
Heavy trucks	36	36		40

SH-288 SB exit to I-45 SB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	6100	5		
Cars	5734	1147		50
Medium Trucks	122	24		50
Heavy trucks	244	49		50

I-45 SB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1500	1		
Cars	1410	1410		40
Medium Trucks	30	30		40
Heavy trucks	60	60		40

I-45 SB exit to SH-288 NB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	4600	5		
Cars	4324	865		50
Medium Trucks	92	18		50
Heavy trucks	184	37		50

SH-288 NB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	4100	2		
Cars	3854	1927		40
Medium Trucks	82	41		40
Heavy trucks	164	82		40

Chartres				
TNM Roadway		Enter in TNM		
ADT=	312	# Lanes	Speed	
Kfactor =	0.060			
DHV=	19	2		
Cars	18	9		35
Medium Trucks	0	0		35
Heavy trucks	1	0		35

Chartres				
TNM Roadway		Enter in TNM		
ADT=	8,247	# Lanes	Speed	
Kfactor =	0.060			
DHV=	495	3		
Cars	465	155		35
Medium Trucks	10	3		35
Heavy trucks	20	7		35

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

SH-288 NB entrance to Gray exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	8700	7	
Cars	8178	1168	50
Medium Trucks	174	25	50
Heavy trucks	348	50	50

Gray exit to I-45 NB and Dallas exits			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7800	5	
Cars	7332	1466	50
Medium Trucks	156	31	50
Heavy trucks	312	62	50

I-45 NB and Dallas exit to I-45 NB/I-45 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	5900	4	
Cars	5546	1387	50
Medium Trucks	118	30	50
Heavy trucks	236	59	50

I-45 NB/I-45 SB entrance to Leeland entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	6900	5	
Cars	6486	1297	50
Medium Trucks	138	28	50
Heavy trucks	276	55	50

Leeland entrance to I-10 WB/I-10 EB/Hardy/McKee exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7600	6	
Cars	7144	1191	50
Medium Trucks	152	25	50
Heavy trucks	304	51	50

I-10 WB/I-10 EB/Hardy/McKee exit to Chenevert entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4000	4	
Cars	3760	940	50
Medium Trucks	80	20	50
Heavy trucks	160	40	50

Chenevert entrance to Lyons exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	5100	5	
Cars	4794	959	50
Medium Trucks	102	20	50
Heavy trucks	204	41	50

I-45 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	800	1	
Cars	752	752	40
Medium Trucks	16	16	40
Heavy trucks	32	32	40

I-45 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1000	1	
Cars	940	940	40
Medium Trucks	20	20	40
Heavy trucks	40	40	40

I-10 WB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	400	1	
Cars	376	376	40
Medium Trucks	8	8	40
Heavy trucks	16	16	40

Gray exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	900	2	
Cars	846	423	40
Medium Trucks	18	9	40
Heavy trucks	36	18	40

Dallas exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1200	2	
Cars	1128	564	40
Medium Trucks	24	12	40
Heavy trucks	48	24	40

Leeland entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	700	1	
Cars	658	658	40
Medium Trucks	14	14	40
Heavy trucks	28	28	40

Elysian exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	100	1	
Cars	94	94	40
Medium Trucks	2	2	40
Heavy trucks	4	4	40

Chenevert entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1300	1	
Cars	1222	1222	40
Medium Trucks	26	26	40
Heavy trucks	52	52	40

Lyons exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	400	1	
Cars	376	376	40
Medium Trucks	8	8	40
Heavy trucks	16	16	40

Chartres			
TNM Roadway		Enter in TNM	
ADT=	8,247	# Lanes	Speed
Kfactor =	0.060		
DHV=	495	3	
Cars	465	155	35
Medium Trucks	10	3	35
Heavy trucks	20	7	35

St Emanuel			
TNM Roadway		Enter in TNM	
ADT=	10,681	# Lanes	Speed
Kfactor =	0.060		
DHV=	641	2	
Cars	602	301	35
Medium Trucks	13	6	35
Heavy trucks	26	13	35

St Emanuel			
TNM Roadway		Enter in TNM	
ADT=	29,623	# Lanes	Speed
Kfactor =	0.060		
DHV=	1777	3	
Cars	1671	557	35
Medium Trucks	36	12	35
Heavy trucks	71	24	35

St Emanuel			
TNM Roadway		Enter in TNM	
ADT=	15,377	# Lanes	Speed
Kfactor =	0.060		
DHV=	923	2	
Cars	867	434	35
Medium Trucks	18	9	35
Heavy trucks	37	18	35

I-10 EB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1400	1	
Cars	1316	1316	40
Medium Trucks	28	28	40
Heavy trucks	56	56	40

I-69 NB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=	3,800	# Lanes	Speed
Kfactor =	0.060		
DHV=	228	1	
Cars	214	214	50
Medium Trucks	5	5	50
Heavy trucks	9	9	50

I-69 NB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=	3,800	# Lanes	Speed
Kfactor =	0.060		
DHV=	228	1	
Cars	214	214	50
Medium Trucks	5	5	50
Heavy trucks	9	9	50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

Lyons exit to I-10 WB/I-10 EB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	4700	4		
Cars	4418	1105		50
Medium Trucks	94	24		50
Heavy trucks	188	47		50

I-10 WB/I-10 EB entrance to End				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8000	6		
Cars	7520	1253		50
Medium Trucks	160	27		50
Heavy trucks	320	53		50

I-10 WB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	900	1		
Cars	846	846		40
Medium Trucks	18	18		40
Heavy trucks	36	36		40

I-10 EB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2300	2		
Cars	2162	1081		40
Medium Trucks	46	23		40
Heavy trucks	92	46		40

I-69 NBFR				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	92	2		
Cars	87	43		35
Medium Trucks	2	1		35
Heavy trucks	4	2		35

I-69 NB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	228	1		
Cars	214	214		50
Medium Trucks	5	5		50
Heavy trucks	9	9		50

I-69 NB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	228	1		
Cars	214	214		50
Medium Trucks	5	5		50
Heavy trucks	9	9		50

SH-288SB

I-45 SB/I-69 SB entrance to I-45 NB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	5500	3		
Cars	5170	1723		50
Medium Trucks	110	37		50
Heavy trucks	220	73		50

I-45 NB entrance to SH-288 SB HOV exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	7700	4		
Cars	7238	1810		50
Medium Trucks	154	39		50
Heavy trucks	308	77		50

SH-288 SB HOV exit to Hamilton entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	6700	3		
Cars	6298	2099		50
Medium Trucks	134	45		50
Heavy trucks	268	89		50

Hamilton entrance to I-69 NB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	7700	4		
Cars	7238	1810		50
Medium Trucks	154	39		50
Heavy trucks	308	77		50

I-69 NB entrance to End				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8400	5		
Cars	7896	1579		50
Medium Trucks	168	34		50
Heavy trucks	336	67		50

I-45 NB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2200	1		
Cars	2068	2068		40
Medium Trucks	44	44		40
Heavy trucks	88	88		40

SH-288 HOV exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1400	1		
Cars	1316	1316		40
Medium Trucks	28	28		40
Heavy trucks	56	56		40

Berry/Hamilton entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1900	1		
Cars	1786	1786		40
Medium Trucks	38	38		40
Heavy trucks	76	76		40

I-69 NB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	900	1		
Cars	846	846		40
Medium Trucks	18	18		40
Heavy trucks	36	36		40

Southmore exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	399	1		
Cars	375	375		40
Medium Trucks	8	8		40
Heavy trucks	16	16		40

SH-288 SB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	600	1		
Cars	564	564		50
Medium Trucks	12	12		50
Heavy trucks	24	24		50

SH-288 SB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	600	1		
Cars	564	564		50
Medium Trucks	12	12		50
Heavy trucks	24	24		50

SH-288 SB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2000	1		
Cars	1880	1880		50
Medium Trucks	40	40		50
Heavy trucks	80	80		50

SH-288 SB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2000	1		
Cars	1880	1880		50
Medium Trucks	40	40		50
Heavy trucks	80	80		50

SH-288 SB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2000	1		
Cars	1880	1880		50
Medium Trucks	40	40		50
Heavy trucks	80	80		50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

SH-288NB

Start to I-69 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	9600	5	
Cars	9024	1805	50
Medium Trucks	192	38	50
Heavy trucks	384	77	50

I-69 SB exit to I-69 NB/Chartres and I-45 NB/I-45 SB exits			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	8100	5	
Cars	7614	1523	50
Medium Trucks	162	32	50
Heavy trucks	324	65	50

I-69 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1500	1	
Cars	1410	1410	40
Medium Trucks	30	30	40
Heavy trucks	60	60	40

I-45 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1700	1	
Cars	1598	1598	40
Medium Trucks	34	34	40
Heavy trucks	68	68	40

Chartres exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	600	1	
Cars	564	564	40
Medium Trucks	12	12	40
Heavy trucks	24	24	40

I-45 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1700	1	
Cars	1598	1598	40
Medium Trucks	34	34	40
Heavy trucks	68	68	40

SH-288 NB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1500	1	
Cars	1410	1410	50
Medium Trucks	30	30	50
Heavy trucks	60	60	50

SH-288 NB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1500	1	
Cars	1410	1410	50
Medium Trucks	30	30	50
Heavy trucks	60	60	50

Downtown Connector SB

I-10 EB and I-45 SB entrances to McKinney/Allen Pkwy exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4400	3	
Cars	4136	1379	50
Medium Trucks	88	29	50
Heavy trucks	176	59	50

McKinney/Allen Pkwy exit to I-10 WB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2600	2	
Cars	2444	1222	50
Medium Trucks	52	26	50
Heavy trucks	104	52	50

I-10 WB entrance to Heiner exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4300	3	
Cars	4042	1347	50
Medium Trucks	86	29	50
Heavy trucks	172	57	50

Heiner exit to End			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2600	3	
Cars	2444	815	50
Medium Trucks	52	17	50
Heavy trucks	104	35	50

Allen Pkwy exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	600	1	
Cars	564	564	40
Medium Trucks	12	12	40
Heavy trucks	24	24	40

I-10 WB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2000	1	
Cars	1880	1880	40
Medium Trucks	40	40	40
Heavy trucks	80	80	40

McKinney exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1500	2	
Cars	1410	705	40
Medium Trucks	30	15	40
Heavy trucks	60	30	40

Heiner exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1700	1	
Cars	1598	1598	40
Medium Trucks	34	34	40
Heavy trucks	68	68	40

SB Houston			
TNM Roadway		Enter in TNM	
ADT=	14,014	# Lanes	Speed
Kfactor =	0.060		
DHV=	841	3	
Cars	790	263	35
Medium Trucks	17	6	35
Heavy trucks	34	11	35

Heiner			
TNM Roadway		Enter in TNM	
ADT=	9,316	# Lanes	Speed
Kfactor =	0.060		
DHV=	1441	3	
Cars	1354	451	35
Medium Trucks	29	10	35
Heavy trucks	58	19	35

Heiner			
TNM Roadway		Enter in TNM	
ADT=	18,250	# Lanes	Speed
Kfactor =	0.060		
DHV=	1095	2	
Cars	1029	515	35
Medium Trucks	22	11	35
Heavy trucks	44	22	35

SB Houston			
TNM Roadway		Enter in TNM	
ADT=	11,840	# Lanes	Speed
Kfactor =	0.060		
DHV=	710	2	
Cars	668	334	35
Medium Trucks	14	7	35
Heavy trucks	28	14	35

Heiner			
TNM Roadway		Enter in TNM	
ADT=	18,250	# Lanes	Speed
Kfactor =	0.060		
DHV=	2795	3	
Cars	2627	876	35
Medium Trucks	56	19	35
Heavy trucks	112	37	35

Downtown Connector NB

Start to Allen Pkwy entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4300	2	
Cars	4042	2021	50
Medium Trucks	86	43	50
Heavy trucks	172	86	50

Allen Pkwy entrance to Walker entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	6200	3	
Cars	5828	1943	50
Medium Trucks	124	41	50
Heavy trucks	248	83	50

Walker entrance to I-10 EB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7500	3	
Cars	7050	2350	50
Medium Trucks	150	50	50
Heavy trucks	300	100	50

I-10 EB exit to I-10 WB and I-45 NB exits			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	5000	2	
Cars	4700	2350	50
Medium Trucks	100	50	50
Heavy trucks	200	100	50

I-10 EB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2500	1	
Cars	2350	2350	40
Medium Trucks	50	50	40
Heavy trucks	100	100	40

I-10 WB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2000	1	
Cars	1880	1880	40
Medium Trucks	40	40	40
Heavy trucks	80	80	40

Allen Pkwy entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2100	1	
Cars	1974	1974	40
Medium Trucks	42	42	40
Heavy trucks	84	84	40

Walker entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1200	1	
Cars	1128	1128	40
Medium Trucks	24	24	40
Heavy trucks	48	48	40

I-45 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3000	1	
Cars	2820	2820	40
Medium Trucks	60	60	40
Heavy trucks	120	120	40

Pease to NB Houston			
TNM Roadway		Enter in TNM	
ADT=	16,417	# Lanes	Speed
Kfactor =	0.060		
DHV=	985	1	
Cars	926	926	35
Medium Trucks	20	20	35
Heavy trucks	39	39	35

Pease to NB Houston			
TNM Roadway		Enter in TNM	
ADT=	20,210	# Lanes	Speed
Kfactor =	0.060		
DHV=	1213	3	
Cars	1140	380	35
Medium Trucks	24	8	35
Heavy trucks	49	16	35

Pease to NB Houston			
TNM Roadway		Enter in TNM	
ADT=	9,316	# Lanes	Speed
Kfactor =	0.060		
DHV=	559	2	
Cars	525	263	35
Medium Trucks	11	6	35
Heavy trucks	22	11	35

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

TRAFFIC DATA FOR NOISE MODELING (YEAR 2035)
NHHIP - SEGMENT 3 (Alternative 12)

MAINLANES
DIRECT CONNECTORS
RAMPS
FRONTAGE ROADS
MANAGED LANES

ML & FR	
Growth Rate =	1%
Kfactor =	0.06
%Cars=	0.94
%Medium Trucks=	0.02
%Heavy Trucks=	0.04

	Information needed
	Calculated fields

QA/QC:
Source of traffic: CDM Smith, H-GAC modified regional travel demand model, received 1/29/15
Source of traffic factors: CDM Smith, raw traffic data for Segment 1 (IH45 south of Gulf Bank Road), received 2/6/15
Existing conditions - speed is posted; Predicted - Speed is design speed (rec'd from Joel S. on 3-6-15)

- Assumptions:
1. traffic factors same for all segments
 2. averaged daily traffic for smaller sections within each segment
 3. ADT not included when DHV was provided by CDM Smith

I-10EB

Start to I-45 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	9300	5	
Cars	8742	1748	50
Medium Trucks	186	37	50
Heavy trucks	372	74	50

I-45 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	900	1	
Cars	846	846	40
Medium Trucks	18	18	40
Heavy trucks	36	36	40

I-10 EB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2100	1	
Cars	1974	1974	50
Medium Trucks	42	42	50
Heavy trucks	84	84	50

I-45 NB exit to I-45 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	8400	4	
Cars	7896	1974	50
Medium Trucks	168	42	50
Heavy trucks	336	84	50

I-45 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3500	2	
Cars	3290	1645	40
Medium Trucks	70	35	40
Heavy trucks	140	70	40

I-10 EB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2100	2	
Cars	1974	987	50
Medium Trucks	42	21	50
Heavy trucks	84	42	50

I-45 SB exit to Smith exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4900	3	
Cars	4606	1535	50
Medium Trucks	98	33	50
Heavy trucks	196	65	50

Smith exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3200	1	
Cars	3008	3008	40
Medium Trucks	64	64	40
Heavy trucks	128	128	40

I-10 EB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2100	2	
Cars	1974	987	50
Medium Trucks	42	21	50
Heavy trucks	84	42	50

Smith exit to I-45 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4000	3	
Cars	3760	1253	50
Medium Trucks	80	27	50
Heavy trucks	160	53	50

I-45 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	1	
Cars	1034	1034	40
Medium Trucks	22	22	40
Heavy trucks	44	44	40

I-10 EB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1500	2	
Cars	1410	705	50
Medium Trucks	30	15	50
Heavy trucks	60	30	50

I-45 SB entrance to Downtown Connector entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	5100	4	
Cars	4794	1199	50
Medium Trucks	102	26	50
Heavy trucks	204	51	50

Downtown Connector entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1500	1	
Cars	1410	1410	40
Medium Trucks	30	30	40
Heavy trucks	60	60	40

I-10 EB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1500	2	
Cars	1410	705	50
Medium Trucks	30	15	50
Heavy trucks	60	30	50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

Downtown Connector entrance to McKee exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	6600	5		
Cars	6204	1241	50	
Medium Trucks	132	26	50	
Heavy trucks	264	53	50	

McKee exit to San Jacinto entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	6100	4		
Cars	5734	1434	50	
Medium Trucks	122	31	50	
Heavy trucks	244	61	50	

San Jacinto entrance to Hamilton/I-69 SB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	7400	5		
Cars	6956	1391	50	
Medium Trucks	148	30	50	
Heavy trucks	296	59	50	

Hamilton/I-69 SB exit to Jensen exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	6400	4		
Cars	6016	1504	50	
Medium Trucks	128	32	50	
Heavy trucks	256	64	50	

Jensen exit to I-69 NB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	6100	4		
Cars	5734	1434	50	
Medium Trucks	122	31	50	
Heavy trucks	244	61	50	

I-69 NB exit to I-69 NB/Chartres entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	3700	2		
Cars	3478	1739	50	
Medium Trucks	74	37	50	
Heavy trucks	148	74	50	

I-69 NB/Chartres entrance to I-69 SB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	7200	3		
Cars	6768	2256	50	
Medium Trucks	144	48	50	
Heavy trucks	288	96	50	

Hamilton/I-69 SB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1100	1		
Cars	1034	1034	40	
Medium Trucks	22	22	40	
Heavy trucks	44	44	40	

I-69 NB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2400	2		
Cars	2256	1128	40	
Medium Trucks	48	24	40	
Heavy trucks	96	48	40	

I-69 NB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1700	2		
Cars	1598	799	40	
Medium Trucks	34	17	40	
Heavy trucks	68	34	40	

I-69 SB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1200	1		
Cars	1128	1128	40	
Medium Trucks	24	24	40	
Heavy trucks	48	48	40	

McKee exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	700	1		
Cars	658	658	40	
Medium Trucks	14	14	40	
Heavy trucks	28	28	40	

San Jacinto entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.940			
DHV=	1400	1		
Cars	1316	1316	40	
Medium Trucks	28	28	40	
Heavy trucks	56	56	40	

Jensen exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	300	1		
Cars	282	282	40	
Medium Trucks	6	6	40	
Heavy trucks	12	12	40	

Chartres entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1800	1		
Cars	1692	1692	40	
Medium Trucks	36	36	40	
Heavy trucks	72	72	40	

I-10 EBFR				
TNM Roadway		Enter in TNM		
ADT=	4,679	# Lanes	Speed	
Kfactor =	0.060			
DHV=	281	2		
Cars	264	132	35	
Medium Trucks	6	3	35	
Heavy trucks	11	6	35	

I-10 EBFR				
TNM Roadway		Enter in TNM		
ADT=	4,679	# Lanes	Speed	
Kfactor =	0.060			
DHV=	281	2		
Cars	264	132	35	
Medium Trucks	6	3	35	
Heavy trucks	11	6	35	

I-10 EBFR				
TNM Roadway		Enter in TNM		
ADT=	4,679	# Lanes	Speed	
Kfactor =	0.060			
DHV=	281	2		
Cars	264	132	35	
Medium Trucks	6	3	35	
Heavy trucks	11	6	35	

I-10 EBFR				
TNM Roadway		Enter in TNM		
ADT=	4,679	# Lanes	Speed	
Kfactor =	0.060			
DHV=	281	2		
Cars	264	132	35	
Medium Trucks	6	3	35	
Heavy trucks	11	6	35	

I-10 EBFR				
TNM Roadway		Enter in TNM		
ADT=	2,883	# Lanes	Speed	
Kfactor =	0.060			
DHV=	173	2		
Cars	163	81	35	
Medium Trucks	3	2	35	
Heavy trucks	7	3	35	

I-10 EB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1500	2		
Cars	1410	705	50	
Medium Trucks	30	15	50	
Heavy trucks	60	30	50	

I-10 EB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1500	2		
Cars	1410	705	50	
Medium Trucks	30	15	50	
Heavy trucks	60	30	50	

I-10 EB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1500	2		
Cars	1410	705	50	
Medium Trucks	30	15	50	
Heavy trucks	60	30	50	

I-10 EB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1500	2		
Cars	1410	705	50	
Medium Trucks	30	15	50	
Heavy trucks	60	30	50	

I-10 EB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1500	2		
Cars	1410	705	50	
Medium Trucks	30	15	50	
Heavy trucks	60	30	50	

I-10 EB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1500	2		
Cars	1410	705	50	
Medium Trucks	30	15	50	
Heavy trucks	60	30	50	

I-10 EB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1500	2		
Cars	1410	705	50	
Medium Trucks	30	15	50	
Heavy trucks	60	30	50	

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-69 SB entrance to I-10 EB HOV entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8000	4		
Cars	7520	1880		50
Medium Trucks	160	40		50
Heavy trucks	320	80		50

I-10 EB HOV entrance to Waco exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8900	5		
Cars	8366	1673		50
Medium Trucks	178	36		50
Heavy trucks	356	71		50

Waco exit to End				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8400	4		
Cars	7896	1974		50
Medium Trucks	168	42		50
Heavy trucks	336	84		50

I-10 EB HOV entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1500	1		
Cars	1410	1410		40
Medium Trucks	30	30		40
Heavy trucks	60	60		40

Waco exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	500	1		
Cars	470	470		40
Medium Trucks	10	10		40
Heavy trucks	20	20		40

I-10 EBFR				
TNM Roadway		Enter in TNM		
ADT=	2,883	# Lanes	Speed	
Kfactor =	0.060			
DHV=	173	2		
Cars	163	81		35
Medium Trucks	3	2		35
Heavy trucks	7	3		35

I-10 EB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1500	2		
Cars	1410	705		50
Medium Trucks	30	15		50
Heavy trucks	60	30		50

I-10 EBFR				
TNM Roadway		Enter in TNM		
ADT=	2,883	# Lanes	Speed	
Kfactor =	0.060			
DHV=	173	2		
Cars	163	81		35
Medium Trucks	3	2		35
Heavy trucks	7	3		35

I-10 EBFR				
TNM Roadway		Enter in TNM		
ADT=	2,883	# Lanes	Speed	
Kfactor =	0.060			
DHV=	173	2		
Cars	163	81		35
Medium Trucks	3	2		35
Heavy trucks	7	3		35

I-10WB

Start to Waco entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	9400	4		
Cars	8836	2209		50
Medium Trucks	188	47		50
Heavy trucks	376	94		50

Waco entrance to I-10 WB HOV exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	9700	5		
Cars	9118	1824		50
Medium Trucks	194	39		50
Heavy trucks	388	78		50

I-10 WB HOV exit to Gregg exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8600	4		
Cars	8084	2021		50
Medium Trucks	172	43		50
Heavy trucks	344	86		50

Gregg exit to I-69 NB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8600	4		
Cars	8084	2021		50
Medium Trucks	172	43		50
Heavy trucks	344	86		50

I-10 WB HOV exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1100	2		
Cars	1034	517		40
Medium Trucks	22	11		40
Heavy trucks	44	22		40

I-69 NB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	900	1		
Cars	846	846		40
Medium Trucks	18	18		40
Heavy trucks	36	36		40

Waco entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	200	1		
Cars	188	188		40
Medium Trucks	4	4		40
Heavy trucks	8	8		40

Gregg exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	42	1		
Cars	39	39		40
Medium Trucks	1	1		40
Heavy trucks	2	2		40

I-10 WBFR				
TNM Roadway		Enter in TNM		
ADT=	838	# Lanes	Speed	
Kfactor =	0.060			
DHV=	50	2		
Cars	47	24		35
Medium Trucks	1	1		35
Heavy trucks	2	1		35

I-10 WBFR				
TNM Roadway		Enter in TNM		
ADT=	838	# Lanes	Speed	
Kfactor =	0.060			
DHV=	50	2		
Cars	47	24		35
Medium Trucks	1	1		35
Heavy trucks	2	1		35

I-10 WBFR				
TNM Roadway		Enter in TNM		
ADT=	838	# Lanes	Speed	
Kfactor =	0.060			
DHV=	92	2		
Cars	87	43		35
Medium Trucks	2	1		35
Heavy trucks	4	2		35

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1100	2		
Cars	1034	517		50
Medium Trucks	22	11		50
Heavy trucks	44	22		50

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1100	2		
Cars	1034	517		50
Medium Trucks	22	11		50
Heavy trucks	44	22		50

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1100	2		
Cars	1034	517		50
Medium Trucks	22	11		50
Heavy trucks	44	22		50

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1100	2		
Cars	1034	517		50
Medium Trucks	22	11		50
Heavy trucks	44	22		50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-69 NB exit to I-69 SB/Hamilton exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	8200	4	
Cars	7708	1927	50
Medium Trucks	164	41	50
Heavy trucks	328	82	50

I-69 SB/Hamilton exit to McKee exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	5600	2	
Cars	5264	2632	50
Medium Trucks	112	56	50
Heavy trucks	224	112	50

McKee exit to I-69 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	5400	2	
Cars	5076	2538	50
Medium Trucks	108	54	50
Heavy trucks	216	108	50

I-69 SB entrance to I-69 NB/Chartres entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7000	2	
Cars	6580	3290	50
Medium Trucks	140	70	50
Heavy trucks	280	140	50

I-69 NB/Chartres entrance to McKee entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	8400	3	
Cars	7896	2632	50
Medium Trucks	168	56	50
Heavy trucks	336	112	50

McKee entrance to I-45 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	10200	4	
Cars	9588	2397	50
Medium Trucks	204	51	50
Heavy trucks	408	102	50

I-45 SB exit to I-45 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	8500	3	
Cars	7990	2663	50
Medium Trucks	170	57	50
Heavy trucks	340	113	50

I-69 SB/Hamilton exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2600	2	
Cars	2444	1222	40
Medium Trucks	52	26	40
Heavy trucks	104	52	40

I-69 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1600	1	
Cars	1504	1504	40
Medium Trucks	32	32	40
Heavy trucks	64	64	40

I-69 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	200	1	
Cars	188	188	40
Medium Trucks	4	4	40
Heavy trucks	8	8	40

I-45 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1700	1	
Cars	1598	1598	40
Medium Trucks	34	34	40
Heavy trucks	68	68	40

I-45 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	900	1	
Cars	846	846	40
Medium Trucks	18	18	40
Heavy trucks	36	36	40

Elysian exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	200	1	
Cars	188	188	40
Medium Trucks	4	4	40
Heavy trucks	8	8	40

Chartres entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2500	1	
Cars	2350	2350	40
Medium Trucks	50	50	40
Heavy trucks	100	100	40

McKee entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1800	1	
Cars	1692	1692	40
Medium Trucks	36	36	40
Heavy trucks	72	72	40

I-10WB FR			
TNM Roadway		Enter in TNM	
ADT=	3,183	# Lanes	Speed
Kfactor =	0.060		
DHV=	191	2	
Cars	180	90	35
Medium Trucks	4	2	35
Heavy trucks	8	4	35

I-10WB FR			
TNM Roadway		Enter in TNM	
ADT=	3,183	# Lanes	Speed
Kfactor =	0.060		
DHV=	191	2	
Cars	180	90	35
Medium Trucks	4	2	35
Heavy trucks	8	4	35

I-10WB FR			
TNM Roadway		Enter in TNM	
ADT=	3,850	# Lanes	Speed
Kfactor =	0.060		
DHV=	231	2	
Cars	217	109	35
Medium Trucks	5	2	35
Heavy trucks	9	5	35

I-10WB FR			
TNM Roadway		Enter in TNM	
ADT=	9,322	# Lanes	Speed
Kfactor =	0.060		
DHV=	559	2	
Cars	526	263	35
Medium Trucks	11	6	35
Heavy trucks	22	11	35

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	2	
Cars	1034	517	50
Medium Trucks	22	11	50
Heavy trucks	44	22	50

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	2	
Cars	1034	517	50
Medium Trucks	22	11	50
Heavy trucks	44	22	50

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	2	
Cars	1034	517	50
Medium Trucks	22	11	50
Heavy trucks	44	22	50

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	2	
Cars	1034	517	50
Medium Trucks	22	11	50
Heavy trucks	44	22	50

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	2	
Cars	1034	517	50
Medium Trucks	22	11	50
Heavy trucks	44	22	50

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	2	
Cars	1034	517	50
Medium Trucks	22	11	50
Heavy trucks	44	22	50

I-10 WB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	2	
Cars	1034	517	50
Medium Trucks	22	11	50
Heavy trucks	44	22	50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-45 NB exit to Louisiana entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	7700	2		
Cars	7238	3619		50
Medium Trucks	154	77		50
Heavy trucks	308	154		50

Louisiana entrance to I-45 NB/Downtown Connector entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	9100	3		
Cars	8554	2851		50
Medium Trucks	182	61		50
Heavy trucks	364	121		50

I-45 NB/Downtown Connector entrance to I-45 SB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	13600	5		
Cars	12784	2557		50
Medium Trucks	272	54		50
Heavy trucks	544	109		50

I-45 SB entrance to End				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	14600	6		
Cars	13724	2287		50
Medium Trucks	292	49		50
Heavy trucks	584	97		50

I-45SB

Start to Quitman exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	10000	5		
Cars	9400	1880		50
Medium Trucks	200	40		50
Heavy trucks	400	80		50

Quitman exit to I-10 WB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	9700	5		
Cars	9118	1824		50
Medium Trucks	194	39		50
Heavy trucks	388	78		50

I-10 WB exit to I-45 SB HOV entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8600	4		
Cars	8084	2021		50
Medium Trucks	172	43		50
Heavy trucks	344	86		50

I-45 NB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	3800	1		
Cars	3572	3572		40
Medium Trucks	76	76		40
Heavy trucks	152	152		40

I-45 SB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1100	1		
Cars	1034	1034		40
Medium Trucks	22	22		40
Heavy trucks	44	44		40

I-10 WB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1100	1		
Cars	1034	1034		40
Medium Trucks	22	22		40
Heavy trucks	44	44		40

I-45 SB HOV entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1700	1		
Cars	1598	1598		40
Medium Trucks	34	34		40
Heavy trucks	68	68		40

Louisiana entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2800	1		
Cars	2632	2632		40
Medium Trucks	56	56		40
Heavy trucks	112	112		40

Downtown Connector entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	700	1		
Cars	658	658		40
Medium Trucks	14	14		40
Heavy trucks	28	28		40

Quitman exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	400	1		
Cars	376	376		40
Medium Trucks	8	8		40
Heavy trucks	16	16		40

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1100	2		
Cars	1034	517		50
Medium Trucks	22	11		50
Heavy trucks	44	22		50

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1800	2		
Cars	1692	846		50
Medium Trucks	36	18		50
Heavy trucks	72	36		50

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1800	2		
Cars	1692	846		50
Medium Trucks	36	18		50
Heavy trucks	72	36		50

I-10 WB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1800	1		
Cars	1692	1692		50
Medium Trucks	36	36		50
Heavy trucks	72	72		50

I-45 SB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2100	2		
Cars	1974	987		50
Medium Trucks	42	21		50
Heavy trucks	84	42		50

I-45 SB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2100	2		
Cars	1974	987		50
Medium Trucks	42	21		50
Heavy trucks	84	42		50

I-45 SB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2100	2		
Cars	1974	987		50
Medium Trucks	42	21		50
Heavy trucks	84	42		50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

I-45 SB HOV entrance to Milam/I-10 EB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	10200	5		
Cars	9588	1918	50	
Medium Trucks	204	41	50	
Heavy trucks	408	82	50	

Milam/I-10 EB exit to I-10 EB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8300	4		
Cars	7802	1951	50	
Medium Trucks	166	42	50	
Heavy trucks	332	83	50	

I-10 EB entrance to I-10 WB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	11600	6		
Cars	10904	1817	50	
Medium Trucks	232	39	50	
Heavy trucks	464	77	50	

I-10 WB entrance to McKinney exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	13300	7		
Cars	12502	1786	50	
Medium Trucks	266	38	50	
Heavy trucks	532	76	50	

McKinney exit to Allen Pkwy exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	11600	6		
Cars	10904	1817	50	
Medium Trucks	232	39	50	
Heavy trucks	464	77	50	

Allen Pkwy exit to Jefferson exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	10800	6		
Cars	10152	1692	50	
Medium Trucks	216	36	50	
Heavy trucks	432	72	50	

Jefferson exit to Heiner entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	7800	5		
Cars	7332	1466	50	
Medium Trucks	156	31	50	
Heavy trucks	312	62	50	

I-10 EB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1100	1		
Cars	1034	1034	40	
Medium Trucks	22	22	40	
Heavy trucks	44	44	40	

I-10 EB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	3500	2		
Cars	3290	1645	40	
Medium Trucks	70	35	40	
Heavy trucks	140	70	40	

I-10 WB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1700	1		
Cars	1598	1598	40	
Medium Trucks	34	34	40	
Heavy trucks	68	68	40	

Milam exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1000	1		
Cars	940	940	40	
Medium Trucks	20	20	40	
Heavy trucks	40	40	40	

I-10 EB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1100	1		
Cars	1034	1034	40	
Medium Trucks	22	22	40	
Heavy trucks	44	44	40	

I-10 WB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1700	1		
Cars	1598	1598	40	
Medium Trucks	34	34	40	
Heavy trucks	68	68	40	

McKinney exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1800	2		
Cars	1692	846	40	
Medium Trucks	36	18	40	
Heavy trucks	72	36	40	

Allen Pkwy exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	800	1		
Cars	752	752	40	
Medium Trucks	16	16	40	
Heavy trucks	32	32	40	

Jefferson exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	3000	2		
Cars	2820	1410	40	
Medium Trucks	60	30	40	
Heavy trucks	120	60	40	

Heiner entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1100	1		
Cars	1034	1034	40	
Medium Trucks	22	22	40	
Heavy trucks	44	44	40	

I-45 SB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	400	2		
Cars	376	188	50	
Medium Trucks	8	4	50	
Heavy trucks	16	8	50	

I-45 SB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	400	2		
Cars	376	188	50	
Medium Trucks	8	4	50	
Heavy trucks	16	8	50	

SB Houston				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	710	2		
Cars	668	334	35	
Medium Trucks	14	7	35	
Heavy trucks	28	14	35	

SB Houston				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	841	3		
Cars	790	263	35	
Medium Trucks	17	6	35	
Heavy trucks	34	11	35	

Heiner				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2641	3		
Cars	2482	827	35	
Medium Trucks	53	18	35	
Heavy trucks	106	35	35	

Heiner				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1541	2		
Cars	1448	724	35	
Medium Trucks	31	15	35	
Heavy trucks	62	31	35	

I-45 SB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	400	2		
Cars	376	188	50	
Medium Trucks	8	4	50	
Heavy trucks	16	8	50	

I-45 SB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	400	2		
Cars	376	188	50	
Medium Trucks	8	4	50	
Heavy trucks	16	8	50	

I-45 SB HOV				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	400	2		
Cars	376	188	50	
Medium Trucks	8	4	50	
Heavy trucks	16	8	50	

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

Heiner entrance to I-69 NB and SH-288 SB exits				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8600	5		
Cars	8084	1617		50
Medium Trucks	172	34		50
Heavy trucks	344	69		50

I-69 NB and SH-288 SB exits to SH-288 NB and I-69 SB entrances				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	4800	2		
Cars	4512	2256		50
Medium Trucks	96	48		50
Heavy trucks	192	96		50

SH-288 NB and I-69 SB entrances to End				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8700	4		
Cars	8178	2045		50
Medium Trucks	174	44		50
Heavy trucks	348	87		50

I-69 NB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	100	1		
Cars	94	94		40
Medium Trucks	2	2		40
Heavy trucks	4	4		40

SH-288 NB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2400	2		
Cars	2256	1128		40
Medium Trucks	48	24		40
Heavy trucks	96	48		40

SH-288 SB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	3700	2		
Cars	3478	1739		40
Medium Trucks	74	37		40
Heavy trucks	148	74		40

I-69 SB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1500	1		
Cars	1410	1410		40
Medium Trucks	30	30		40
Heavy trucks	60	60		40

Jefferson entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	987	2		
Cars	927	464		40
Medium Trucks	20	10		40
Heavy trucks	39	20		40

I-45 SB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	803	1	
Cars	755	755	50
Medium Trucks	16	16	50
Heavy trucks	32	32	50

I-45NB

Start to I-69 NB and SH-288 SB exits				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	6900	4		
Cars	6486	1622		50
Medium Trucks	138	35		50
Heavy trucks	276	69		50

I-69 NB and SH-288 SB exits to SH-288 NB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2100	2		
Cars	1974	987		50
Medium Trucks	42	21		50
Heavy trucks	84	42		50

SH-288 NB entrance to I-10 WB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	6100	4		
Cars	5734	1434		50
Medium Trucks	122	31		50
Heavy trucks	244	61		50

I-10 WB exit to Downtown Connector entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2800	2		
Cars	2632	1316		50
Medium Trucks	56	28		50
Heavy trucks	112	56		50

I-69 NB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1200	1		
Cars	1128	1128		40
Medium Trucks	24	24		40
Heavy trucks	48	48		40

SH-288 NB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	4000	2		
Cars	3760	1880		40
Medium Trucks	80	40		40
Heavy trucks	160	80		40

I-10 WB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	3800	1		
Cars	3572	3572		40
Medium Trucks	76	76		40
Heavy trucks	152	152		40

Downtown Connector entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	3000	1		
Cars	2820	2820		40
Medium Trucks	60	60		40
Heavy trucks	120	120		40

SH-288 SB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	4400	2		
Cars	4136	2068		40
Medium Trucks	88	44		40
Heavy trucks	176	88		40

I-45 NBFR				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1603	3		
Cars	1506	502		35
Medium Trucks	32	11		35
Heavy trucks	64	21		35

I-45 NB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	803	1	
Cars	755	755	50
Medium Trucks	16	16	50
Heavy trucks	32	32	50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

Downtown Connector entrance to I-10 WB/Louisiana entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4900	3	
Cars	4606	1535	50
Medium Trucks	98	33	50
Heavy trucks	196	65	50

I-10 WB/Louisiana entrance to I-10 EB/Travis entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	6300	5	
Cars	5922	1184	50
Medium Trucks	126	25	50
Heavy trucks	252	50	50

I-10 EB/Travis entrance to End			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7700	6	
Cars	7238	1206	50
Medium Trucks	154	26	50
Heavy trucks	308	51	50

I-10 WB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	900	1	
Cars	846	846	40
Medium Trucks	18	18	40
Heavy trucks	36	36	40

I-10 EB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	900	1	
Cars	846	846	40
Medium Trucks	18	18	40
Heavy trucks	36	36	40

Louisiana entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	500	1	
Cars	470	470	40
Medium Trucks	10	10	40
Heavy trucks	20	20	40

Travis entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	400	1	
Cars	376	376	40
Medium Trucks	8	8	40
Heavy trucks	16	16	40

I-45 NB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2800	2	
Cars	2632	1316	50
Medium Trucks	56	28	50
Heavy trucks	112	56	50

I-45 NB HOV			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2400	2	
Cars	2256	1128	50
Medium Trucks	48	24	50
Heavy trucks	96	48	50

I-69SB

Start to I-10 WB/I-10 EB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	13300	6	
Cars	12502	2084	50
Medium Trucks	266	44	50
Heavy trucks	532	89	50

I-10 WB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1600	1	
Cars	1504	1504	40
Medium Trucks	32	32	40
Heavy trucks	64	64	40

I-10 EB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1200	1	
Cars	1128	1128	40
Medium Trucks	24	24	40
Heavy trucks	48	48	40

I-69 SBFR			
TNM Roadway		Enter in TNM	
ADT=	1,865	# Lanes	Speed
Kfactor =	0.060		
DHV=	112	2	
Cars	105	53	35
Medium Trucks	2	1	35
Heavy trucks	4	2	35

I-69 SB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=	3,800	# Lanes	Speed
Kfactor =	0.060		
DHV=	228	1	
Cars	214	214	50
Medium Trucks	5	5	50
Heavy trucks	9	9	50

I-10 WB/I-10 EB exit to Lyons entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	10500	4	
Cars	9870	2468	50
Medium Trucks	210	53	50
Heavy trucks	420	105	50

Lyons entrance			
TNM Roadway		Enter in TNM	
2014 ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	600	1	
Cars	564	564	40
Medium Trucks	12	12	40
Heavy trucks	24	24	40

I-69 SBFR			
TNM Roadway		Enter in TNM	
ADT=	1,019	# Lanes	Speed
Kfactor =	0.060		
DHV=	61	2	
Cars	57	29	35
Medium Trucks	1	1	35
Heavy trucks	2	1	35

I-69 SB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=	3,800	# Lanes	Speed
Kfactor =	0.060		
DHV=	228	1	
Cars	214	214	50
Medium Trucks	5	5	50
Heavy trucks	9	9	50

Lyons entrance to Jackson exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	11100	5	
Cars	10434	2087	50
Medium Trucks	222	44	50
Heavy trucks	444	89	50

Jackson exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1400	2	
Cars	1316	658	40
Medium Trucks	28	14	40
Heavy trucks	56	28	40

I-69 SB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=	3,800	# Lanes	Speed
Kfactor =	0.060		
DHV=	228	1	
Cars	214	214	50
Medium Trucks	5	5	50
Heavy trucks	9	9	50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

Jackson exit to I-10 WB/I-10 EB/Hardy entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	9700	3		
Cars	9118	3039		50
Medium Trucks	194	65		50
Heavy trucks	388	129		50

I-10 WB/I-10 EB/Hardy entrance to I-45 SB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	15200	4		
Cars	14288	3572		50
Medium Trucks	304	76		50
Heavy trucks	608	152		50

I-45 SB exit to SH-288 SB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	13800	3		
Cars	12972	4324		50
Medium Trucks	276	92		50
Heavy trucks	552	184		50

SH-288 SB exit to Webster entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	10300	2		
Cars	9682	4841		50
Medium Trucks	206	103		50
Heavy trucks	412	206		50

Webster entrance to SH-288 SB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	11400	2		
Cars	10716	5358		50
Medium Trucks	228	114		50
Heavy trucks	456	228		50

SH-288 SB entrance to Caroline exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	13400	4		
Cars	12596	3149		50
Medium Trucks	268	67		50
Heavy trucks	536	134		50

Caroline exit to SH-288 NB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	12200	3		
Cars	11468	3823		50
Medium Trucks	244	81		50
Heavy trucks	488	163		50

I-10 WB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1800	2		
Cars	1692	846		40
Medium Trucks	36	18		40
Heavy trucks	72	36		40

I-45 SB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1500	1		
Cars	1410	1410		40
Medium Trucks	30	30		40
Heavy trucks	60	60		40

SH-288 SB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	3400	2		
Cars	3196	1598		40
Medium Trucks	68	34		40
Heavy trucks	136	68		40

SH-288 SB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2300	2		
Cars	2162	1081		40
Medium Trucks	46	23		40
Heavy trucks	92	46		40

SH-288 NB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.007			
DHV=	1700	1		
Cars	1598	1598		40
Medium Trucks	34	34		40
Heavy trucks	68	68		40

I-10 EB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	700	1		
Cars	658	658		40
Medium Trucks	14	14		40
Heavy trucks	28	28		40

Webster entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1700	2		
Cars	1598	799		40
Medium Trucks	34	17		40
Heavy trucks	68	34		40

Caroline exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	1200	1		
Cars	1128	1128		40
Medium Trucks	24	24		40
Heavy trucks	48	48		40

Hardy entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	3000	1		
Cars	2820	2820		40
Medium Trucks	60	60		40
Heavy trucks	120	120		40

Hamilton				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	277	4		
Cars	260	65		35
Medium Trucks	6	1		35
Heavy trucks	11	3		35

Hamilton				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	303	3		
Cars	285	95		35
Medium Trucks	6	2		35
Heavy trucks	12	4		35

Hamilton				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	309	2		
Cars	290	145		35
Medium Trucks	6	3		35
Heavy trucks	12	6		35

Hamilton				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	12	1		
Cars	11	11		35
Medium Trucks	0	0		35
Heavy trucks	0	0		35

I-69 SB HOV (reversible)				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	228	1		
Cars	214	214		50
Medium Trucks	5	5		50
Heavy trucks	9	9		50

DEIS Traffic Noise Technical Report
North Houston Highway Improvement Project

SH-288 NB entrance to Spur 527 entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	13900	3	
Cars	13066	4355	50
Medium Trucks	278	93	50
Heavy trucks	556	185	50

Spur 527 entrance to End			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	17300	5	
Cars	16262	3252	50
Medium Trucks	346	69	50
Heavy trucks	692	138	50

Spur 527 entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4600	2	
Cars	4324	2162	40
Medium Trucks	92	46	40
Heavy trucks	184	92	40

I-69 SB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=	9,188	# Lanes	Speed
Kfactor =	0.060		
DHV=	551	1	
Cars	518	518	50
Medium Trucks	11	11	50
Heavy trucks	22	22	50

I-69NB

Start to Spur 527 exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	17500	5	
Cars	16450	3290	50
Medium Trucks	350	70	50
Heavy trucks	700	140	50

Spur 527 exit to Main exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	12800	3	
Cars	12032	4011	50
Medium Trucks	256	85	50
Heavy trucks	512	171	50

Main exit to San Jacinto entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	11700	3	
Cars	10998	3666	50
Medium Trucks	234	78	50
Heavy trucks	468	156	50

San Jacinto entrance to SH-288 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	12100	4	
Cars	11374	2844	50
Medium Trucks	242	61	50
Heavy trucks	484	121	50

SH-288 SB exit to SH-288 NB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	11500	4	
Cars	10810	2703	50
Medium Trucks	230	58	50
Heavy trucks	460	115	50

SH-288 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	600	1	
Cars	564	564	40
Medium Trucks	12	12	40
Heavy trucks	24	24	40

SH-288 NB exit			
TNM Roadway		Enter in TNM	
ADT=	0	# Lanes	Speed
Kfactor =	0.060		
DHV=	2900	2	
Cars	2726	1363	40
Medium Trucks	58	29	40
Heavy trucks	116	58	40

Spur 527 exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4700	2	
Cars	4418	2209	40
Medium Trucks	94	47	40
Heavy trucks	188	94	40

Main exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	1	
Cars	1034	1034	40
Medium Trucks	22	22	40
Heavy trucks	44	44	40

San Jacinto entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	900	1	
Cars	846	846	40
Medium Trucks	18	18	40
Heavy trucks	36	36	40

Chartres			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =			
DHV=	300	2	
Cars	282	141	35
Medium Trucks	6	3	35
Heavy trucks	12	6	35

Chartres			
TNM Roadway		Enter in TNM	
ADT=	9,516	# Lanes	Speed
Kfactor =	0.060		
DHV=	571	3	
Cars	537	179	35
Medium Trucks	11	4	35
Heavy trucks	23	8	35

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North Houston Highway Improvement Project

SH-288 NB exit to SH-288 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	8600	3	
Cars	8084	2695	50
Medium Trucks	172	57	50
Heavy trucks	344	115	50

SH-288 NB entrance to Gray exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	12600	5	
Cars	11844	2369	50
Medium Trucks	252	50	50
Heavy trucks	504	101	50

Gray exit to McGowen entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	10200	4	
Cars	9588	2397	50
Medium Trucks	204	51	50
Heavy trucks	408	102	50

McGowen entrance to Polk exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	10900	4	
Cars	10246	2562	50
Medium Trucks	218	55	50
Heavy trucks	436	109	50

Polk exit to I-45 NB/I-45 SB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	10900	3	
Cars	10246	3415	50
Medium Trucks	218	73	50
Heavy trucks	436	145	50

I-45 NB/I-45 SB entrance to I-10 EB/I-10 WB/Hardy/McKee exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	12200	4	
Cars	11468	2867	50
Medium Trucks	244	61	50
Heavy trucks	488	122	50

I-10 EB/I-10 WB/Hardy/McKee exit to Chenevert entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	7800	3	
Cars	7332	2444	50
Medium Trucks	156	52	50
Heavy trucks	312	104	50

SH-288 NB entrance			
TNM Roadway		Enter in TNM	
ADT=	0	# Lanes	Speed
Kfactor =	0.060		
DHV=	4000	2	
Cars	3760	1880	40
Medium Trucks	80	40	40
Heavy trucks	160	80	40

Gray exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2500	2	
Cars	2350	1175	40
Medium Trucks	50	25	40
Heavy trucks	100	50	40

McGowen entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	1	
Cars	1034	1034	40
Medium Trucks	22	22	40
Heavy trucks	44	44	40

Polk exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1100	1	
Cars	1034	1034	40
Medium Trucks	22	22	40
Heavy trucks	44	44	40

I-45 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1200	1	
Cars	1128	1128	40
Medium Trucks	24	24	40
Heavy trucks	48	48	40

I-10 WB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	200	1	
Cars	188	188	40
Medium Trucks	4	4	40
Heavy trucks	8	8	40

I-10 EB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1700	2	
Cars	1598	799	40
Medium Trucks	34	17	40
Heavy trucks	68	34	40

Chartres			
TNM Roadway		Enter in TNM	
ADT=	9,516	# Lanes	Speed
Kfactor =	0.060		
DHV=	571	3	
Cars	537	179	35
Medium Trucks	11	4	35
Heavy trucks	23	8	35

Chartres			
TNM Roadway		Enter in TNM	
ADT=	8,391	# Lanes	Speed
Kfactor =	0.060		
DHV=	503	2	
Cars	473	237	35
Medium Trucks	10	5	35
Heavy trucks	20	10	35

Chartres			
TNM Roadway		Enter in TNM	
ADT=	8,247	# Lanes	Speed
Kfactor =	0.060		
DHV=	495	3	
Cars	465	155	35
Medium Trucks	10	3	35
Heavy trucks	20	7	35

St Emanuel			
TNM Roadway		Enter in TNM	
ADT=	10,681	# Lanes	Speed
Kfactor =	0.060		
DHV=	641	2	
Cars	602	301	35
Medium Trucks	13	6	35
Heavy trucks	26	13	35

St Emanuel			
TNM Roadway		Enter in TNM	
ADT=	19,578	# Lanes	Speed
Kfactor =	0.060		
DHV=	1175	3	
Cars	1104	368	35
Medium Trucks	23	8	35
Heavy trucks	47	16	35

Hardy exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2400	1	
Cars	2256	2256	40
Medium Trucks	48	48	40
Heavy trucks	96	96	40

St Emanuel			
TNM Roadway		Enter in TNM	
ADT=	22,275	# Lanes	Speed
Kfactor =	0.060		
DHV=	1337	4	
Cars	1256	314	35
Medium Trucks	27	7	35
Heavy trucks	53	13	35

I-69 NB HOV (reversible)			
TNM Roadway		Enter in TNM	
ADT=	3,800	# Lanes	Speed
Kfactor =	0.060		
DHV=	228	1	
Cars	214	214	50
Medium Trucks	5	5	50
Heavy trucks	9	9	50

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Chenevert entrance to Lyons exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	9000	5		
Cars	8460	1692		50
Medium Trucks	180	36		50
Heavy trucks	360	72		50

Lyons exit to I-10 WB/I-10 EB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8700	4		
Cars	8178	2045		50
Medium Trucks	174	44		50
Heavy trucks	348	87		50

I-10 WB/I-10 EB entrance to End				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	12000	6		
Cars	11280	1880		50
Medium Trucks	240	40		50
Heavy trucks	480	80		50

I-10 WB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	900	1		
Cars	846	846		40
Medium Trucks	18	18		40
Heavy trucks	36	36		40

Lyons exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	300	1		
Cars	282	282		40
Medium Trucks	6	6		40
Heavy trucks	12	12		40

I-10 EB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2400	2		
Cars	2256	1128		40
Medium Trucks	48	24		40
Heavy trucks	96	48		40

I-69 NB HOV (reversible)				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	228	1		
Cars	214	214		50
Medium Trucks	5	5		50
Heavy trucks	9	9		50

I-69 NBFR				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	92	2		
Cars	87	43		35
Medium Trucks	2	1		35
Heavy trucks	4	2		35

I-69 NB HOV (reversible)				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	228	1		
Cars	214	214		50
Medium Trucks	5	5		50
Heavy trucks	9	9		50

SH-288SB

I-45 NB/I-45 SB entrance to I-69 SB/Caroline exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	8100	4		
Cars	7614	1904		50
Medium Trucks	162	41		50
Heavy trucks	324	81		50

I-69 SB exit				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	2300	2		
Cars	2162	1081		40
Medium Trucks	46	23		40
Heavy trucks	92	46		40

I-69SB/Caroline exit to Jackson entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	6100	2		
Cars	5734	2867		50
Medium Trucks	122	61		50
Heavy trucks	244	122		50

Jackson entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	600	1		
Cars	564	564		40
Medium Trucks	12	12		40
Heavy trucks	24	24		40

Jackson entrance to I-69 NB and I-69 SB/Webster/Hamilton entrances				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	6300	2		
Cars	5922	2961		50
Medium Trucks	126	63		50
Heavy trucks	252	126		50

I-6 9SB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	3900	2		
Cars	3666	1833		40
Medium Trucks	78	39		40
Heavy trucks	156	78		40

I-69 NB entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	600	1		
Cars	564	564		40
Medium Trucks	12	12		40
Heavy trucks	24	24		40

Chenevert entrance				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	800	1		
Cars	752	752		40
Medium Trucks	16	16		40
Heavy trucks	32	32		40

I-69NB and I-69 SB/Hamilton entrances to End				
TNM Roadway		Enter in TNM		
ADT=		# Lanes	Speed	
Kfactor =	0.060			
DHV=	11000	5		
Cars	10340	2068		50
Medium Trucks	220	44		50
Heavy trucks	440	88		50

SH-288NB

Start to I-69 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	11100	4	
Cars	10434	2609	50
Medium Trucks	222	56	50
Heavy trucks	444	111	50

I-69 SB exit to I-69 NB/Chartres exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	9000	4	
Cars	8460	2115	50
Medium Trucks	180	45	50
Heavy trucks	360	90	50

I-69NB/Chartres exit to Chenevert exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4700	3	
Cars	4418	1473	50
Medium Trucks	94	31	50
Heavy trucks	188	63	50

Chenevert exit to I-69 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3600	2	
Cars	3384	1692	50
Medium Trucks	72	36	50
Heavy trucks	144	72	50

I-69 NB entrance to I-45NB/I-45 SB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	6400	4	
Cars	6016	1504	50
Medium Trucks	128	32	50
Heavy trucks	256	64	50

I-69 SB/Caroline exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2100	1	
Cars	1974	1974	40
Medium Trucks	42	42	40
Heavy trucks	84	84	40

I-69 NB/Chartres exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4300	2	
Cars	4042	2021	40
Medium Trucks	86	43	40
Heavy trucks	172	86	40

I-69 NB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	2900	2	
Cars	2726	1363	40
Medium Trucks	58	29	40
Heavy trucks	116	58	40

Caroline Exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	400	1	
Cars	376	376	40
Medium Trucks	8	8	40
Heavy trucks	16	16	40

Chenevert exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1300	1	
Cars	1222	1222	40
Medium Trucks	26	26	40
Heavy trucks	52	52	40

Downtown Connector NB

Start to Walker entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	4400	3	
Cars	4136	1379	50
Medium Trucks	88	29	50
Heavy trucks	176	59	50

Walker entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	900	1	
Cars	846	846	40
Medium Trucks	18	18	40
Heavy trucks	36	36	40

Pease to NB Houston			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1213	3	
Cars	1140	380	35
Medium Trucks	24	8	35
Heavy trucks	49	16	35

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North Houston Highway Improvement Project

Walker entrance to I-10 EB exit			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	5200	3	
Cars	4888	1629	50
Medium Trucks	104	35	50
Heavy trucks	208	69	50

I-10 EB exit to I-10 WB and I-45 NB exits			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	3700	2	
Cars	3478	1739	50
Medium Trucks	74	37	50
Heavy trucks	148	74	50

I-10 EB entrance			
TNM Roadway		Enter in TNM	
ADT=		# Lanes	Speed
Kfactor =	0.060		
DHV=	1500	1	
Cars	1410	1410	40
Medium Trucks	30	30	40
Heavy trucks	60	60	40

Pease to NB Houston			
TNM Roadway		Enter in TNM	
ADT=	9,316	# Lanes	Speed
Kfactor =	0.060		
DHV=	559	2	
Cars	525	263	35
Medium Trucks	11	6	35
Heavy trucks	22	11	35

Appendix D: Noise Receiver Locations



Legend

- Existing ROW
- Proposed ROW - Alternative 4
- Proposed ROW - Alternative 5
- Proposed ROW - Alternative 7
- Potential Displacement
- Not Impacted
- Impacted
- Potentially Benefitted
- Parks and Trails

Scale

1:10,000

0 500 1,000 Feet

Based on April 2016 Schematic Plans
Aerial Photography - 2012

Location Map

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APPENDIX D

NOISE RECEIVER LOCATIONS

SHEET 1 OF 4

SEGMENT 1

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT

DEIS TRAFFIC NOISE TECHNICAL REPORT

HARRIS COUNTY, TEXAS

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Legend

- Existing ROW
- Proposed ROW - Alternative 4
- Proposed ROW - Alterantive 5
- Proposed ROW - Alterantive 7
- Potential Displacement
- Not Impacted
- Impacted
- Potentially Benefitted
- Parks and Trails

Scale

1:10,000

0 500 1,000 Feet

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Map

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APPENDIX D

NOISE RECEIVER LOCATIONS

SHEET 2 OF 4

SEGMENT 1

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT

DEIS TRAFFIC NOISE TECHNICAL REPORT

HARRIS COUNTY, TEXAS

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Legend

- Existing ROW
- Proposed ROW - Alternative 4
- Proposed ROW - Alternative 5
- Proposed ROW - Alternative 7
- Potential Displacement
- Not Impacted
- Impacted
- Potentially Benefitted
- Parks and Trails

1:10,000

0 500 1,000 Feet

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8

45

69

610

MONTGOMERY

LIBERTY

HARRIS

FORT BEND

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APPENDIX D

NOISE RECEIVER LOCATIONS

SHEET 3 OF 4

SEGMENT 1

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT

DEIS TRAFFIC NOISE TECHNICAL REPORT

HARRIS COUNTY, TEXAS

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Legend

- Existing ROW
- Proposed ROW - Alternative 4
- Proposed ROW - Alternative 5
- Proposed ROW - Alternative 7
- Potential Displacement
- Not Impacted
- Impacted
- Potentially Benefitted
- Parks and Trails

1:10,000

0 500 1,000 Feet

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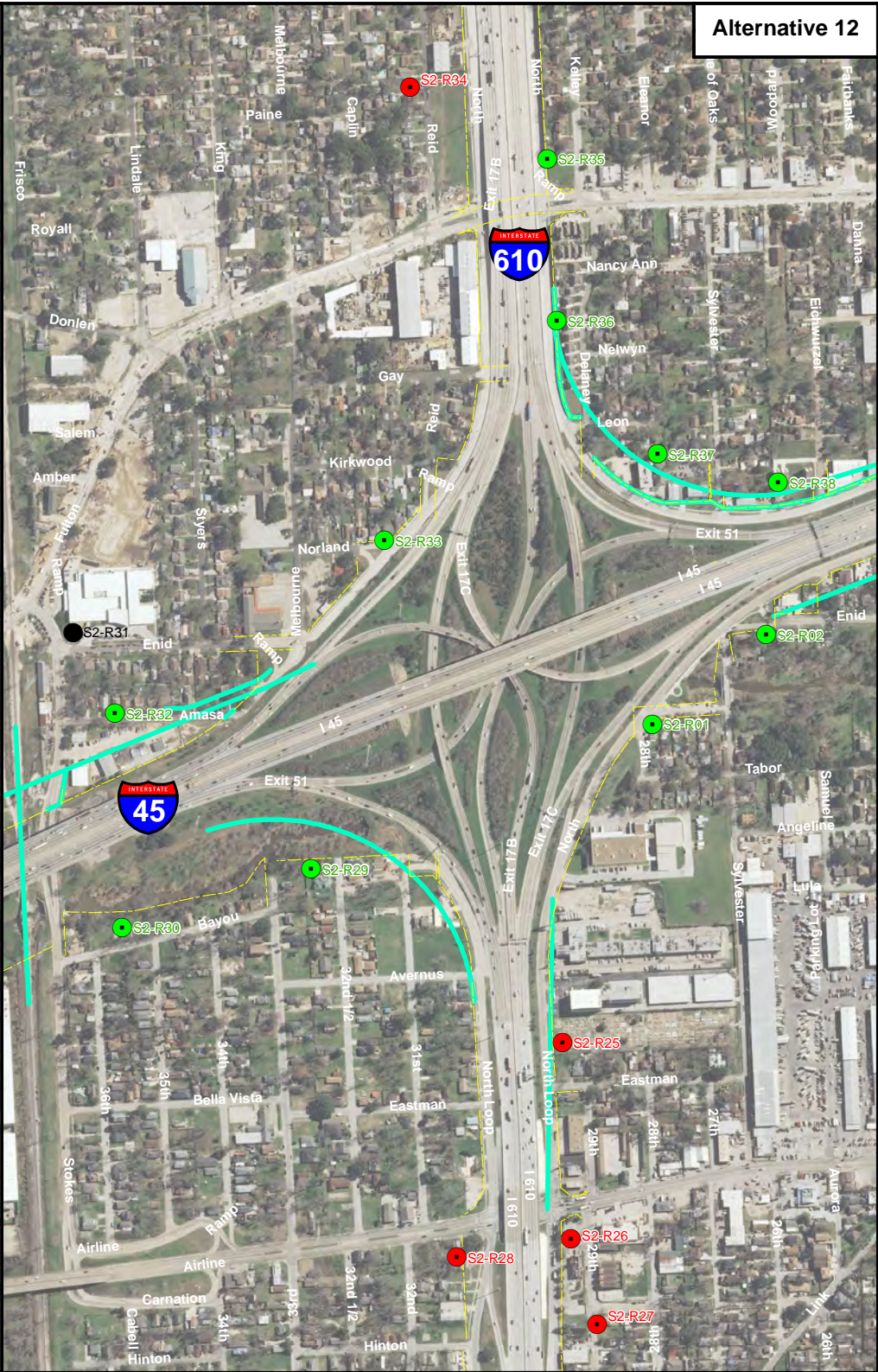
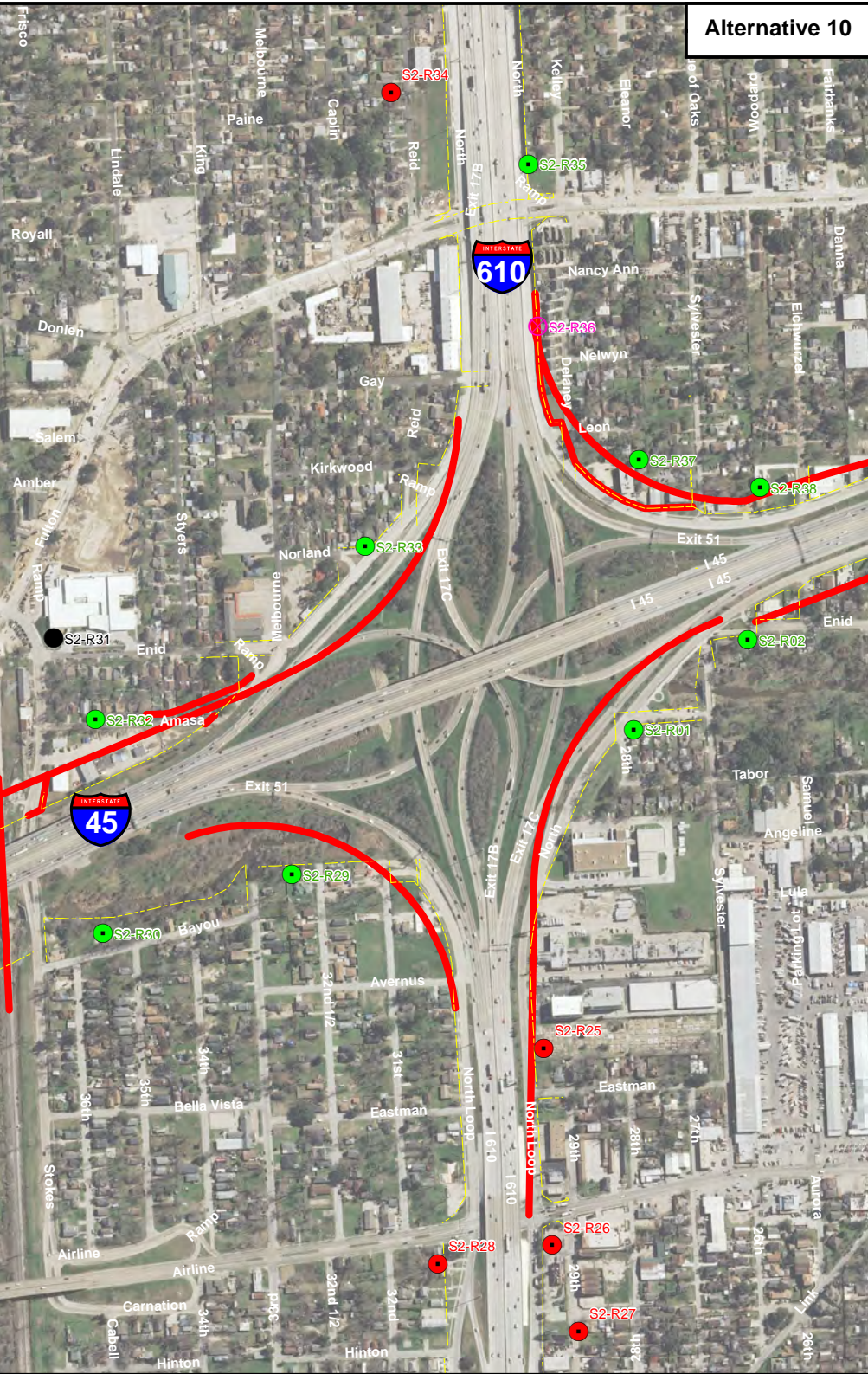
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APPENDIX D

NOISE RECEIVER LOCATIONS
SHEET 4 OF 4
SEGMENT 1

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT
DEIS TRAFFIC NOISE TECHNICAL REPORT
HARRIS COUNTY, TEXAS

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Legend

	Existing ROW		Potential Displacement
	Proposed ROW - Alternative 10		Not Impacted
	Proposed ROW - Alternative 11		Impacted
	Proposed ROW - Alternative 12		Potentially Benefitted
	Parks and Trails		

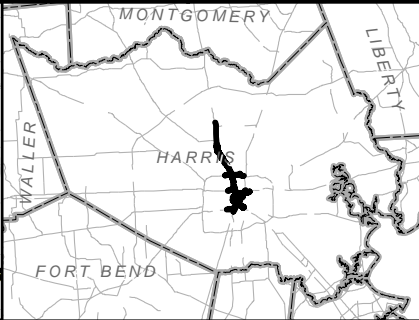
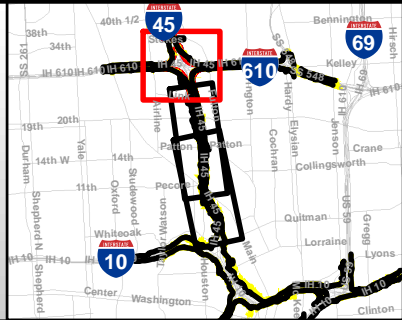
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Feet

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APPENDIX D

NOISE RECEIVER LOCATIONS
SHEET 1 OF 3
SEGMENT 2

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT
DEIS TRAFFIC NOISE TECHNICAL REPORT
HARRIS COUNTY, TEXAS

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Legend

- Existing ROW
- Proposed ROW - Alternative 10
- Proposed ROW - Alternative 11
- Proposed ROW - Alternative 12
- Potential Displacement
- Not Impacted
- Impacted
- Potentially Benefitted
- Parks and Trails

1:6,000

0 250 500 Feet

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APPENDIX D

NOISE RECEIVER LOCATIONS
SHEET 2 OF 3
SEGMENT 2

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT
DEIS TRAFFIC NOISE TECHNICAL REPORT
HARRIS COUNTY, TEXAS

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Legend

- Existing ROW
- Proposed ROW - Alternative 10
- Proposed ROW - Alternative 11
- Proposed ROW - Alternative 12
- Potential Displacement
- Not Impacted
- Impacted
- Potentially Benefitted
- Parks and Trails

Scale: 1:6,000

0 250 500 Feet

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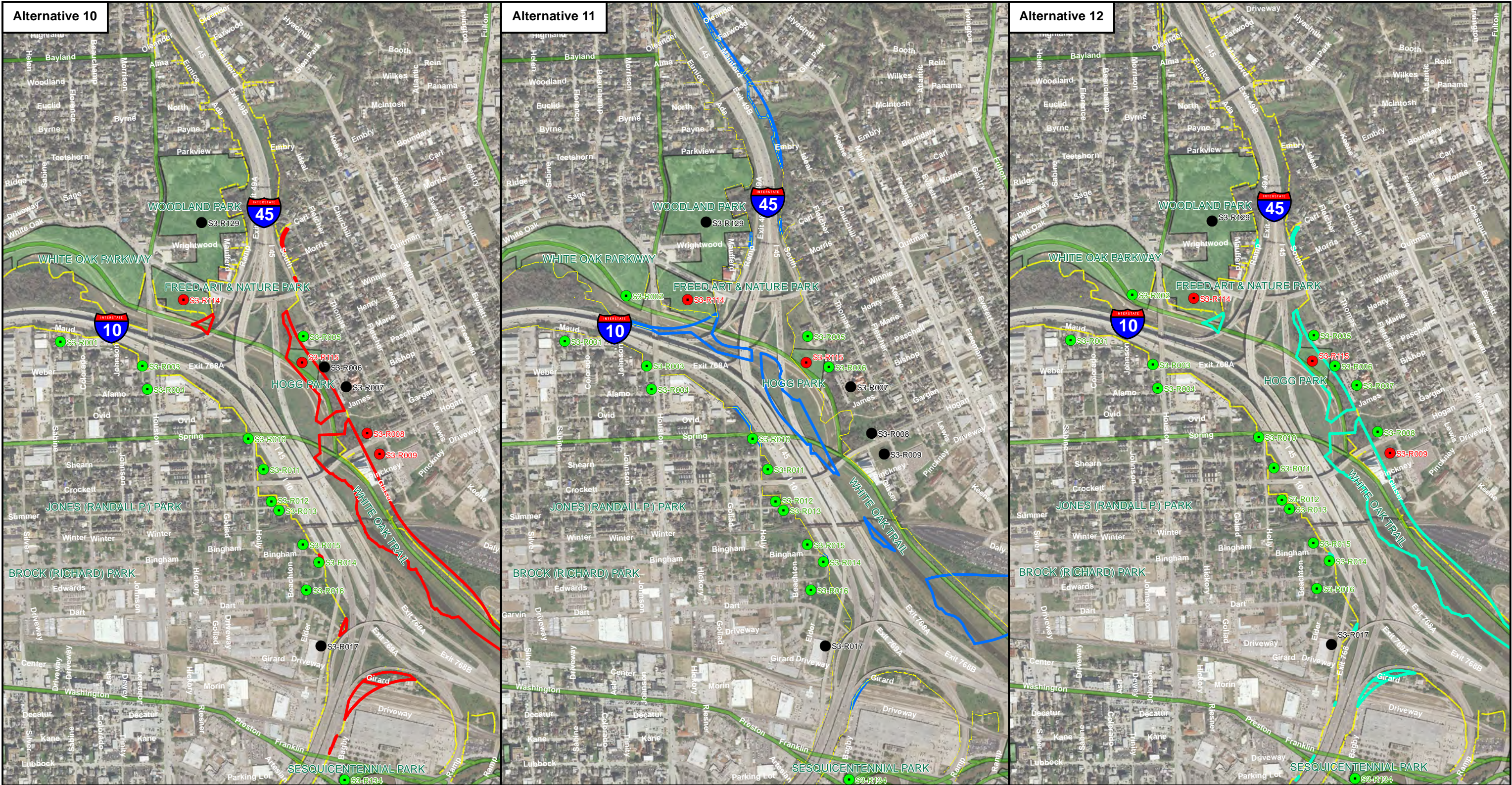
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APPENDIX D

NOISE RECEIVER LOCATIONS
SHEET 3 OF 3
SEGMENT 2

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT
DEIS TRAFFIC NOISE TECHNICAL REPORT
HARRIS COUNTY, TEXAS

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Legend

- Existing ROW
- Proposed ROW - Alternative 10
- Proposed ROW - Alternative 11
- Proposed ROW - Alternative 12
- Potential Displacement
- Not Impacted
- Impacted
- Potentially Benefitted
- Parks and Trails

N

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0 500 1,000 Feet

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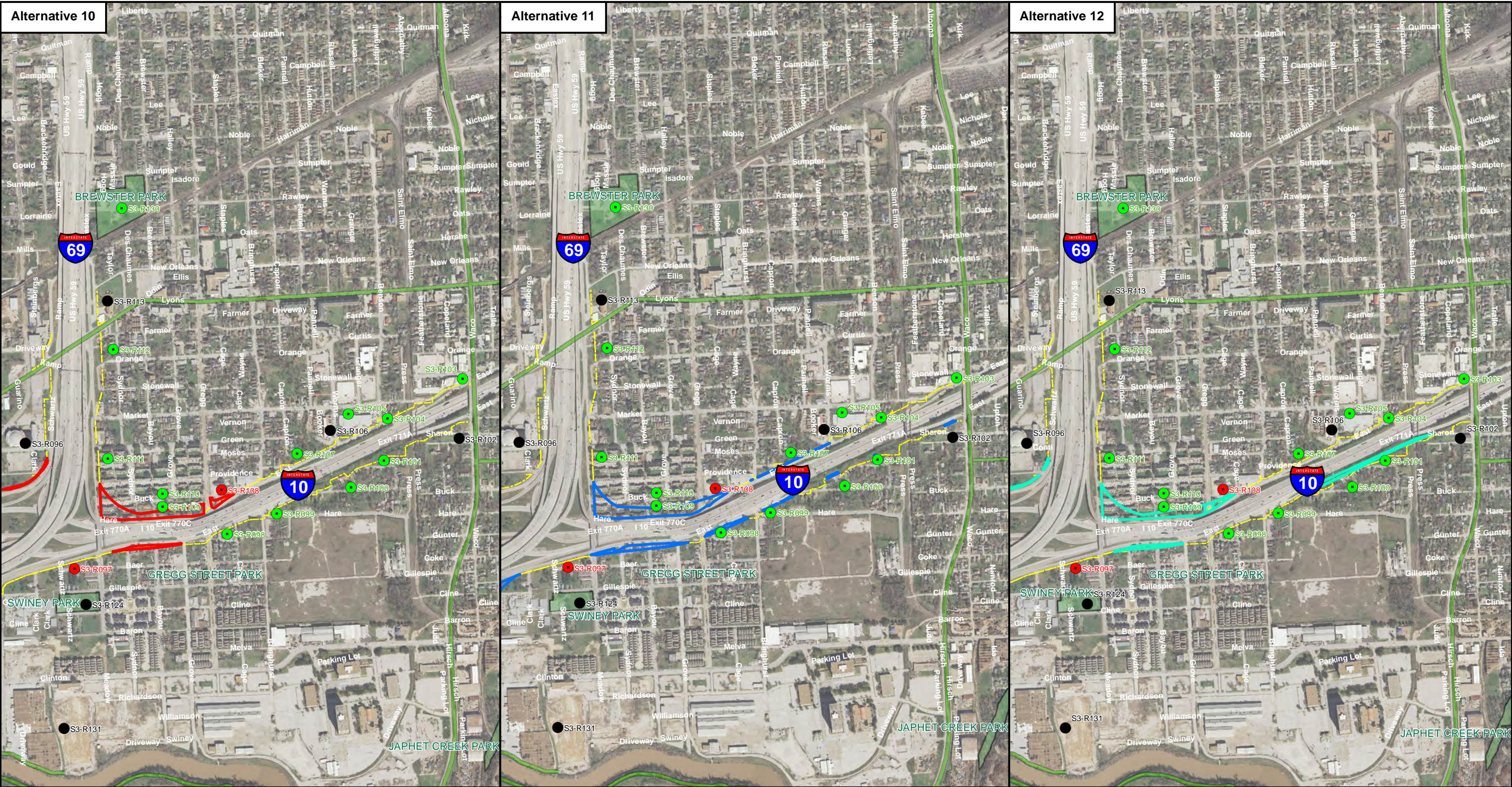
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APPENDIX D

NOISE RECEIVER LOCATIONS
SHEET 1 OF 6
SEGMENT 3

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT
DEIS TRAFFIC NOISE TECHNICAL REPORT
HARRIS COUNTY, TEXAS

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Legend

- Existing ROW
- Proposed ROW - Alternative 10
- Proposed ROW - Alternative 11
- Proposed ROW - Alternative 12
- Potential Displacement
- Not Impacted
- Impacted
- Potentially Benefitted
- Parks and Trails

1:12,500

0 500 1,000 Feet

Based on April 2016 Schematic Plans
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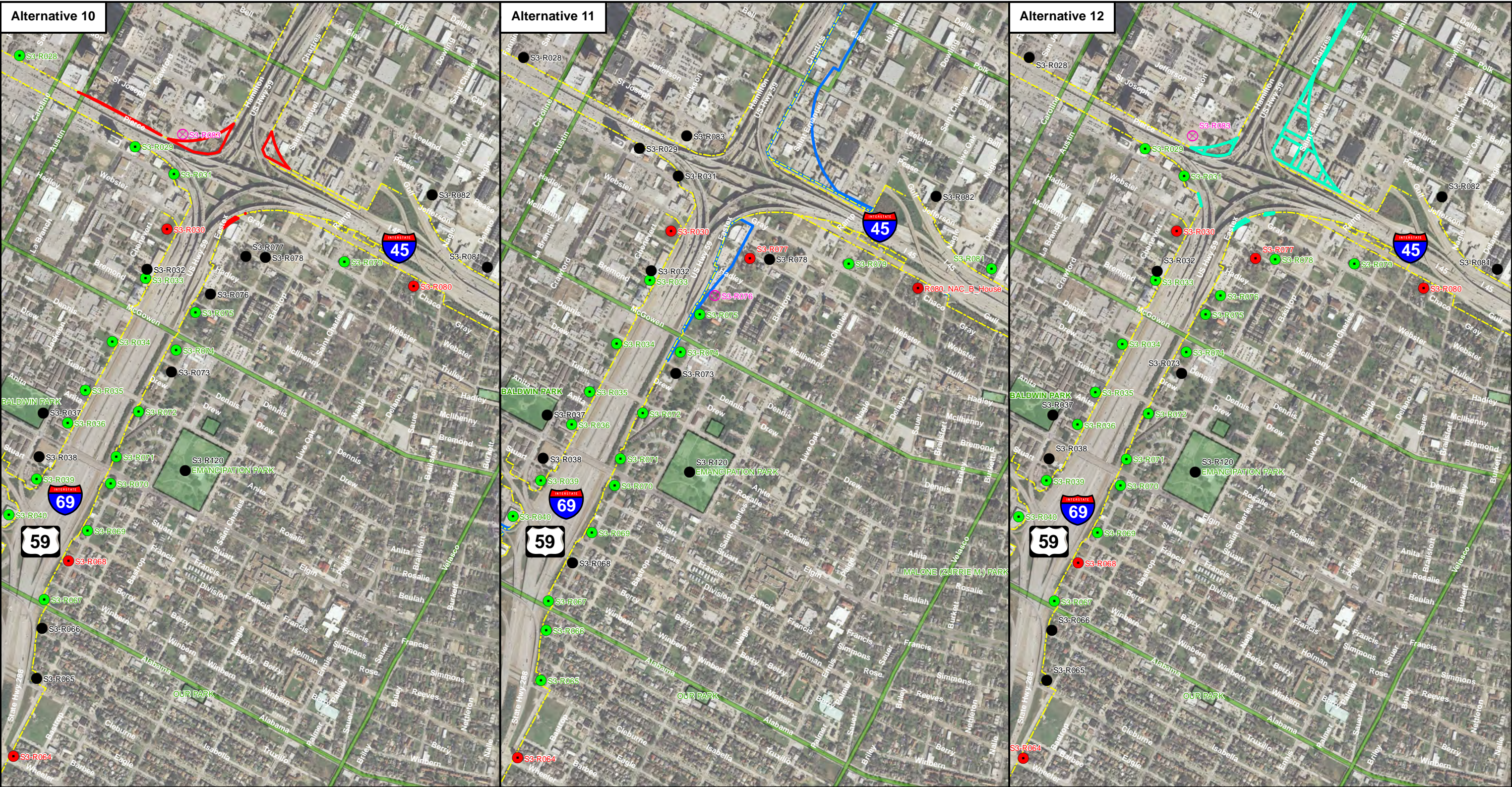
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APPENDIX D

NOISE RECEIVER LOCATIONS
SHEET 3 OF 6
SEGMENT 3

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT
DEIS TRAFFIC NOISE TECHNICAL REPORT
HARRIS COUNTY, TEXAS

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Legend

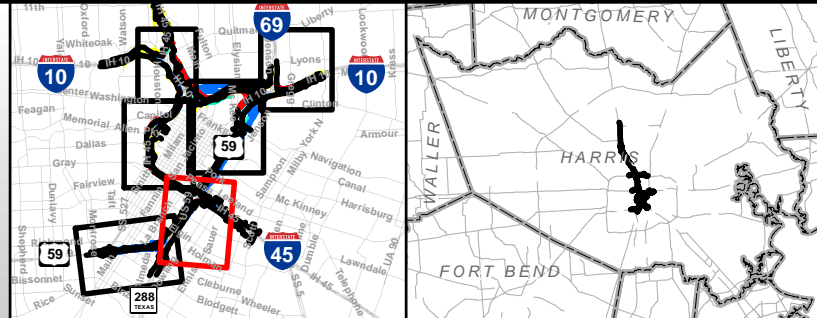
- Existing ROW
- Proposed ROW - Alternative 10
- Proposed ROW - Alternative 11
- Proposed ROW - Alternative 12
- Potential Displacement
- Not Impacted
- Impacted
- Potentially Benefitted
- Parks and Trails

North Arrow

1:12,500

0 500 1,000 Feet

Based on April 2016 Schematic Plans
Aerial Photography - 2012

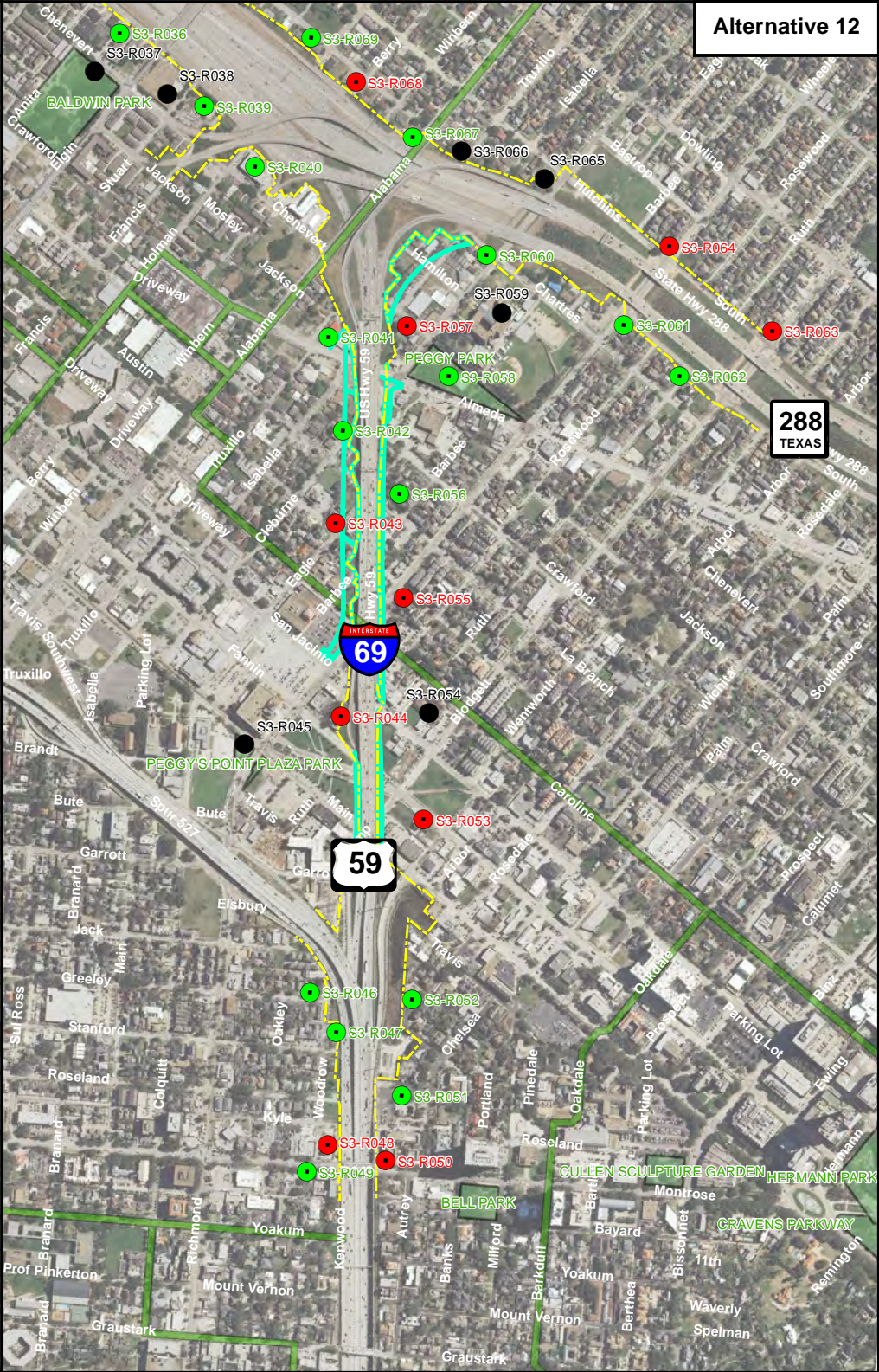
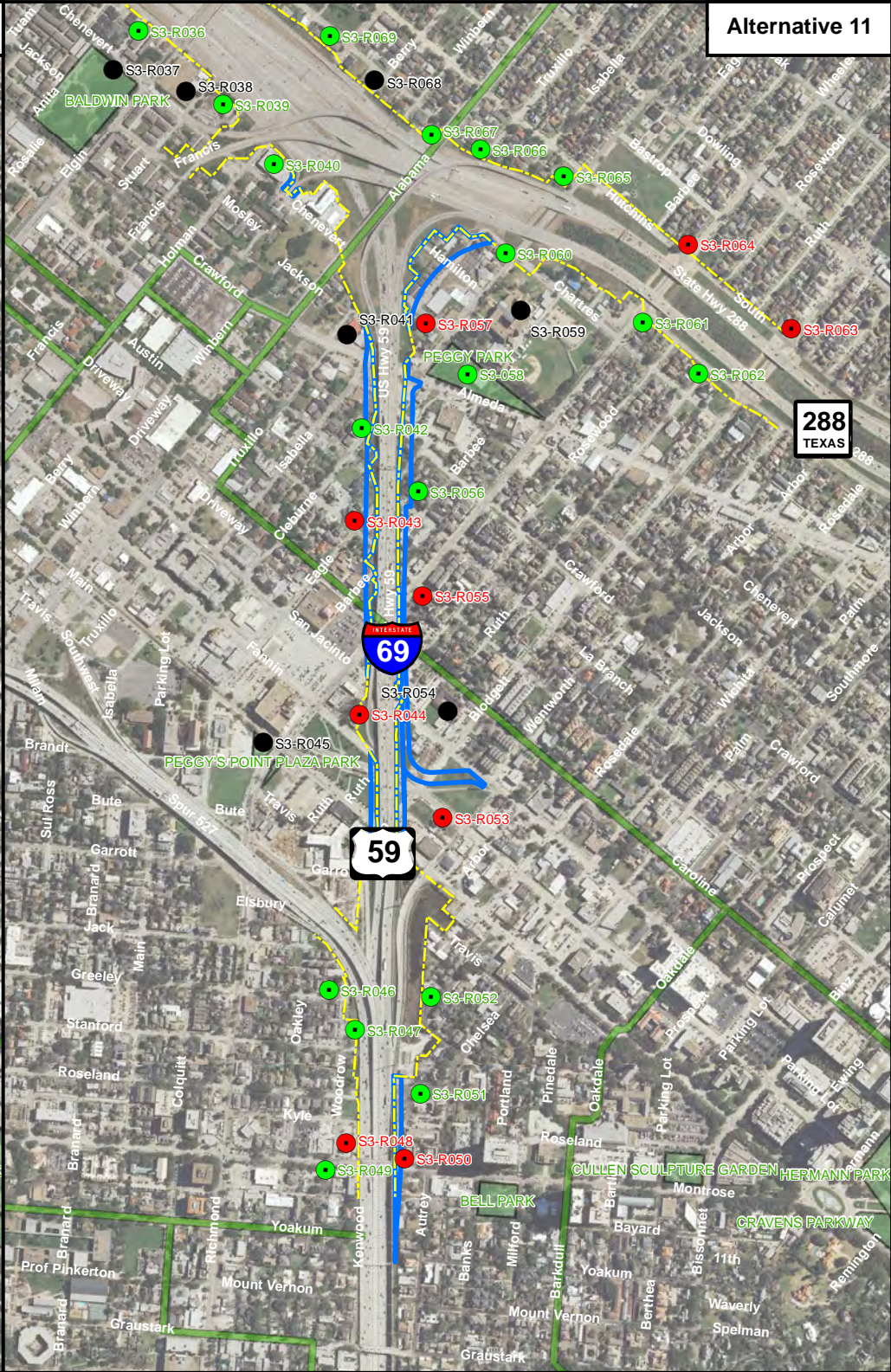
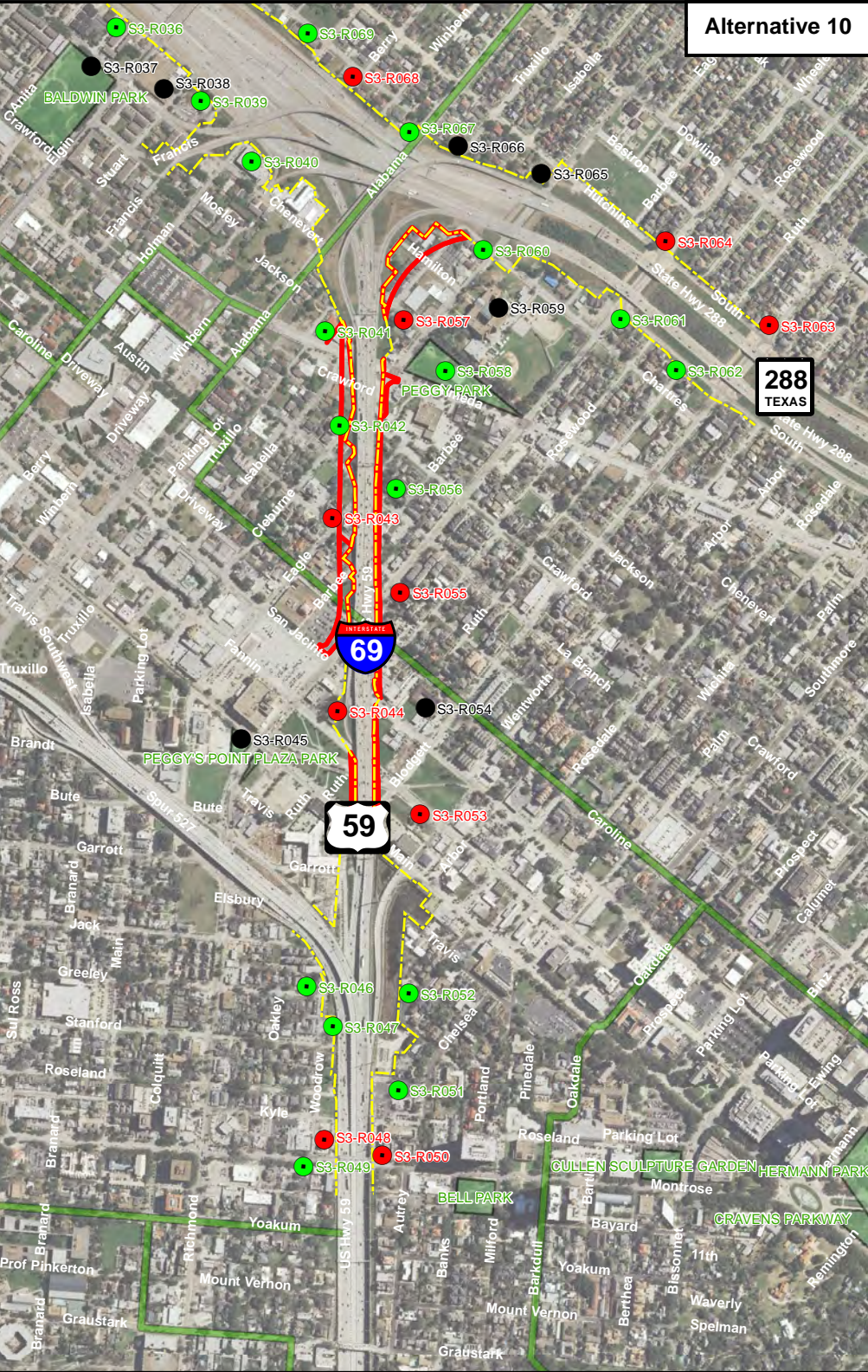


APPENDIX D

NOISE RECEIVER LOCATIONS
SHEET 4 OF 6
SEGMENT 3

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT
DEIS TRAFFIC NOISE TECHNICAL REPORT
HARRIS COUNTY, TEXAS

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Legend

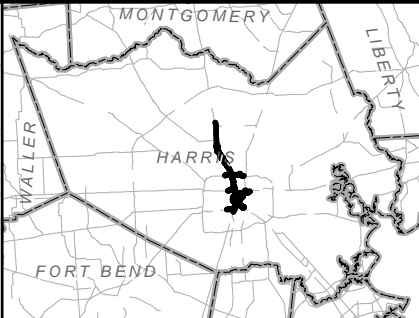
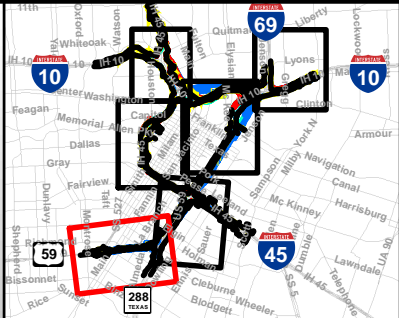
	Existing ROW		Potential Displacement
	ROW Alternative 10		Not Impacted
	ROW Alternative 11		Impacted
	ROW Alternative 12		Potentially Benefitted
			Parks and Trails

1:12,500

0 500 1,000

Feet

Based on April 2016 Schematic Plans
Aerial Photography - 2012



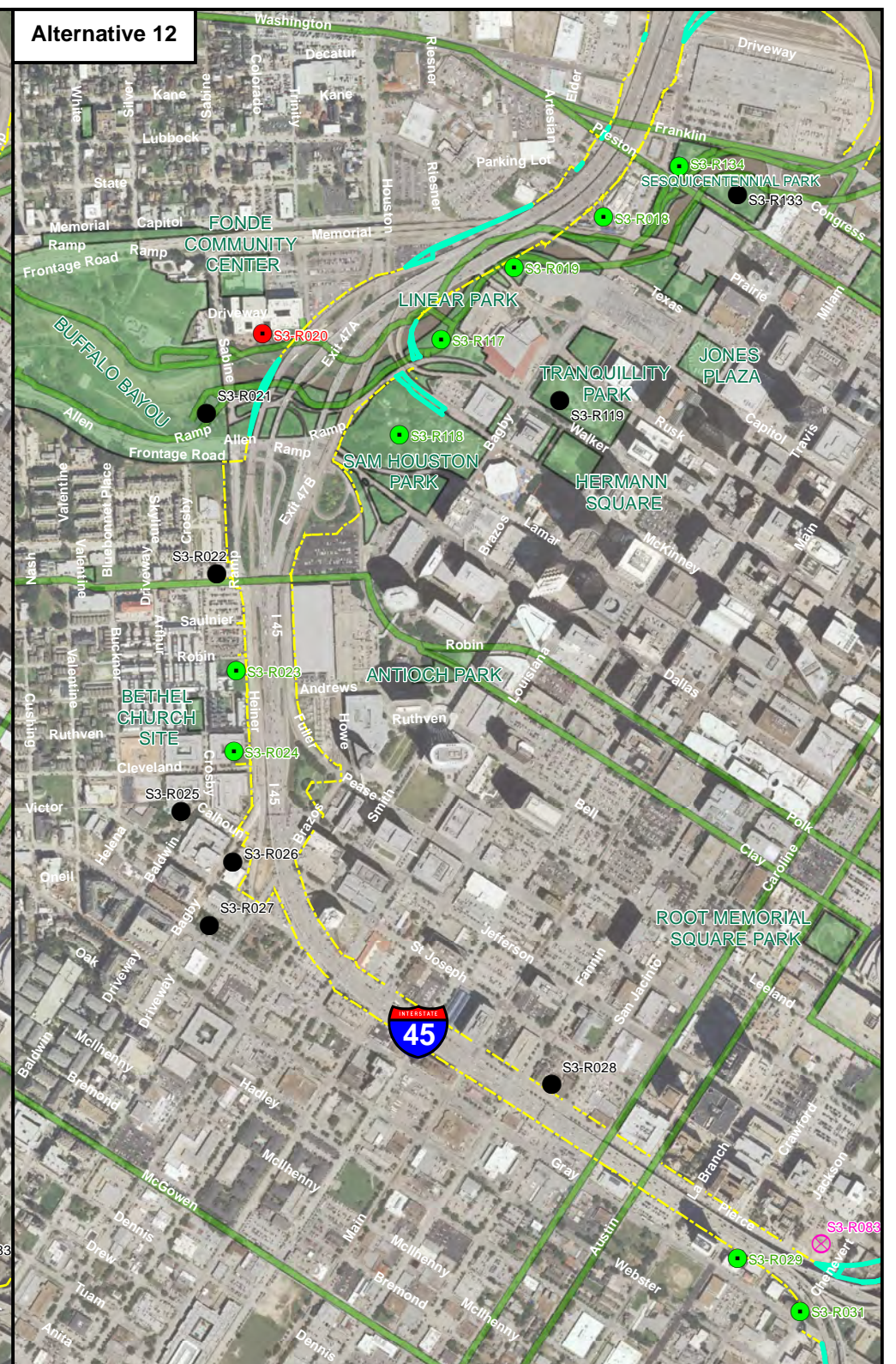
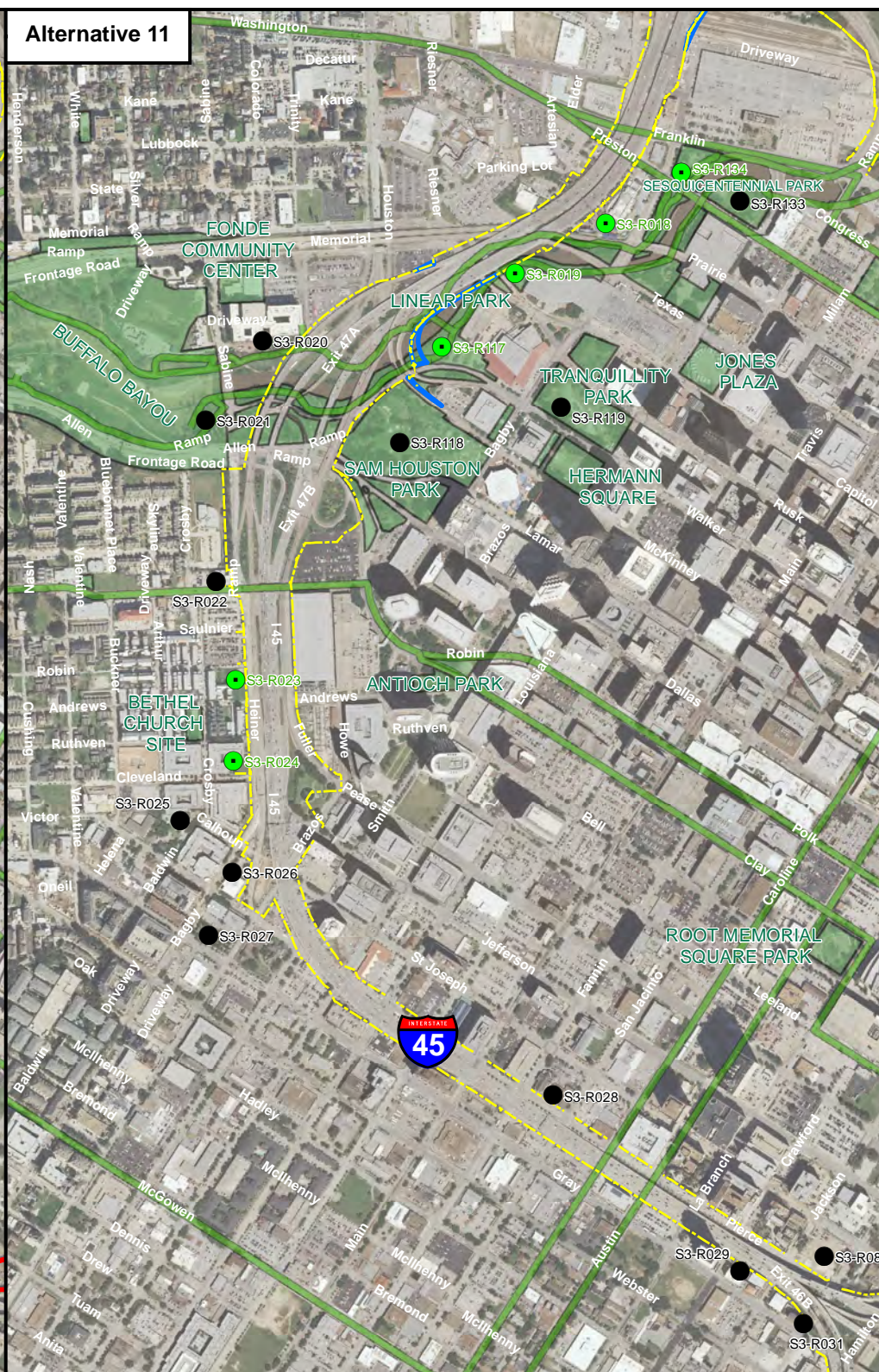
HNTB

APPENDIX D





NOISE RECEIVER LOCATIONS
SHEET 5 OF 6
SEGMENT 3





NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT
DEIS TRAFFIC NOISE TECHNICAL REPORT
HARRIS COUNTY, TEXAS


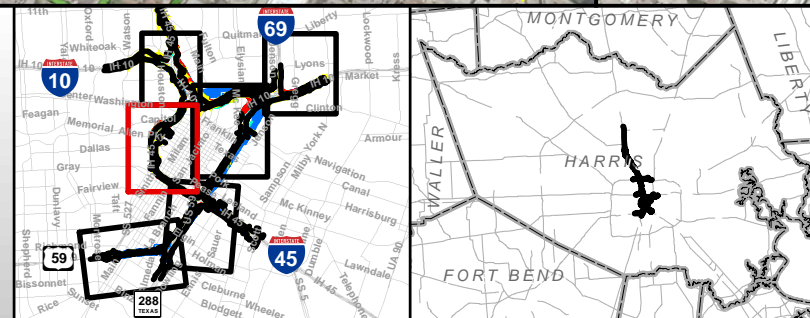
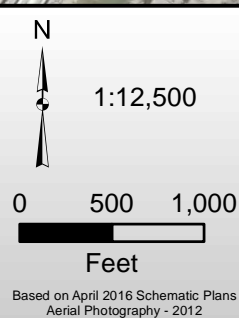

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Legend

-  Existing ROW
 Proposed ROW - Alternative 10
 Proposed ROW - Alternative 11
 Proposed ROW - Alternative 12

-  Potential Displacement
 -  Not Impacted
 -  Impacted
 -  Potentially Benefitted
-
-

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APPENDIX D

**NOISE RECEIVER LOCATIONS
SHEET 6 OF 6
SEGMENT 3**

**NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT
DEIS TRAFFIC NOISE TECHNICAL REPORT
HARRIS COUNTY, TEXAS**

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